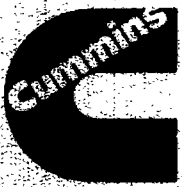


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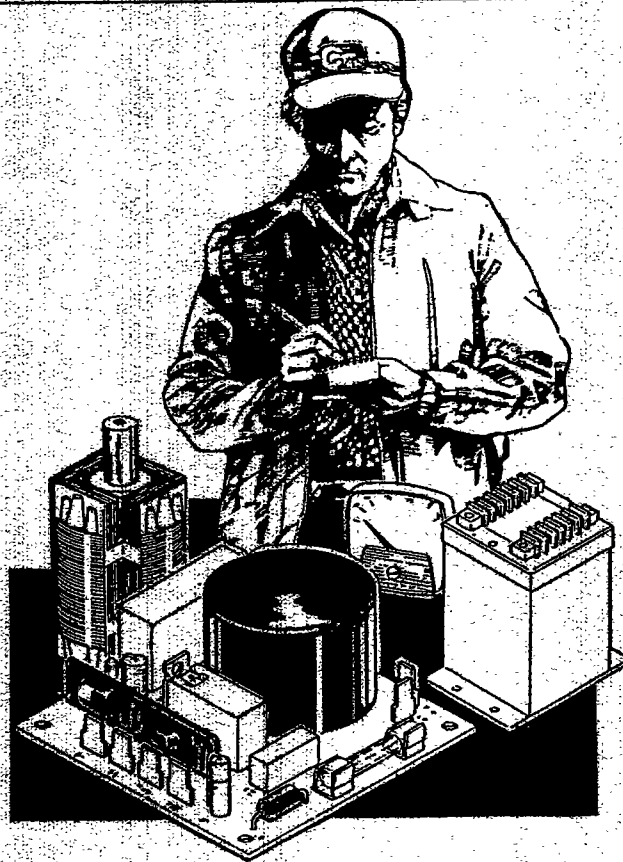
Parts Catalog

DNBA / DWBA

DNCA / DWCA

DNCB / DWCB

PMG Generator Set



General Information

For part or service, contact the distributor from whom you purchased this equipment or refer to the nearest Authorized Cummins Distributor.

To avoid errors or delays in filling your parts order, always give the full MODEL, SERIAL and ID No. from the nameplate.

For handy reference, insert "YOUR" nameplate information in the spaces below.



AC Generator Set
Model _____

kw	kva	pf	phase
voltage	amps		
duty	overload		
rpm	hs		
class of insulation	pmg voltage		
field amp max	field voltage max		
generator model no.			
voltage regulator model no.			
ID no.			
generator set serial no.			
BS5000		NEMA	

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Introduction

This Parts Manual applies to the Standard Gen Sets Listed below. The illustrations are arranged in groups of related items, and each part or assembly is identified by a Reference Number. All parts illustrated are typical, and unless otherwise mentioned in the description column the parts are interchangeable between models.

These typical illustrations are subject to change and reflect only the latest replacement parts arrangement. The Right and Left sides of the Set are determined by FACING the FRONT (Engine end) of the Set.

Set Data Table

MODEL IDENTIFICATION	RATING	RPM RATING	BATTERY VOLTAGE
35.0 DNBA/DWBA - */ # @	35,000 WATTS	1500 RPM	24 VDC
40.0 DNBA/DWBA - */ # @	40,000 WATTS	1800 RPM	24 VDC
40.0 DNCA/DWCA - */ # @	40,000 WATTS	1500 RPM	24 VDC
50.0 DNCA/DWCA - */ # @	50,000 WATTS	1800 RPM	24 VDC
50.0 DNCB/DWCB - */ # @	50,000 WATTS	1500 RPM	24 VDC
60.0 DNCB/DWCB - */ # @	60,000 WATTS	1800 RPM	24 VDC

Electrical Data Table

*VOLTAGE CODE	VOLTS	HERTZ	WIRE	PHASE	NOTES
H	347/600	60	4	3	
L	120/208	60	12	3	+
	127/220	60	12	3	
	139/240	60	12	3	
	240/416	60	12	3	
	254/440	60	12	3	
	277/480	60	12	3	
Z	110/190	50	12	3	+
	115/200	50	12	3	
	120/208	50	12	3	
	127/220	50	12	3	
	220/380	50	12	3	
	230/400	50	12	3	
	240/416	50	12	3	
	254/440	50	12	3	

* - Voltage Codes follow Model Letter designations.

- Specification Number: Number 1 is Standard, all others indicate variations.

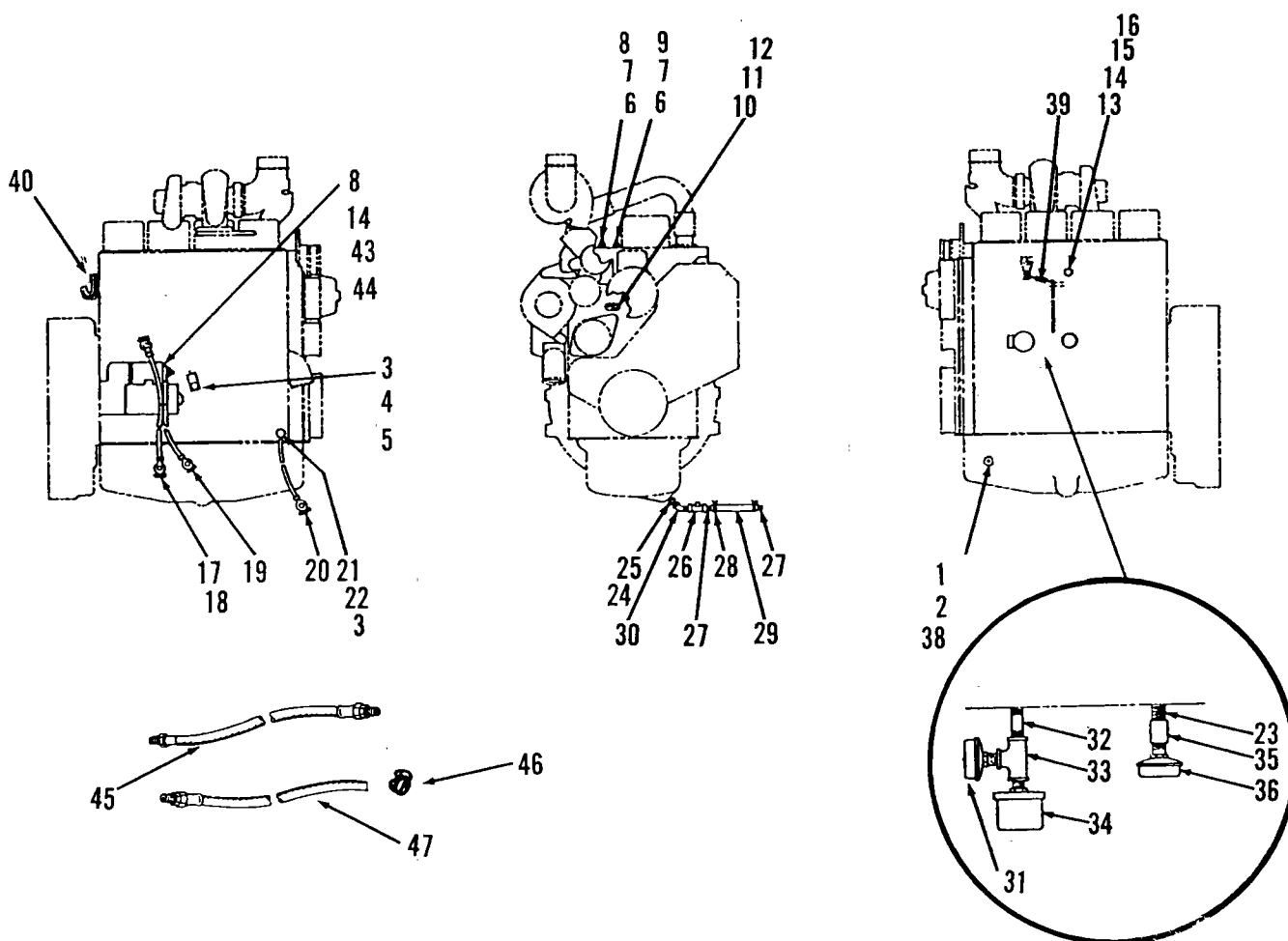
@ - Specification Letter: Letter advances (A to B, B to C, etc) with major manufacturing changes.

+ - The Stators are Reconnectible.

Engine Replacement Parts

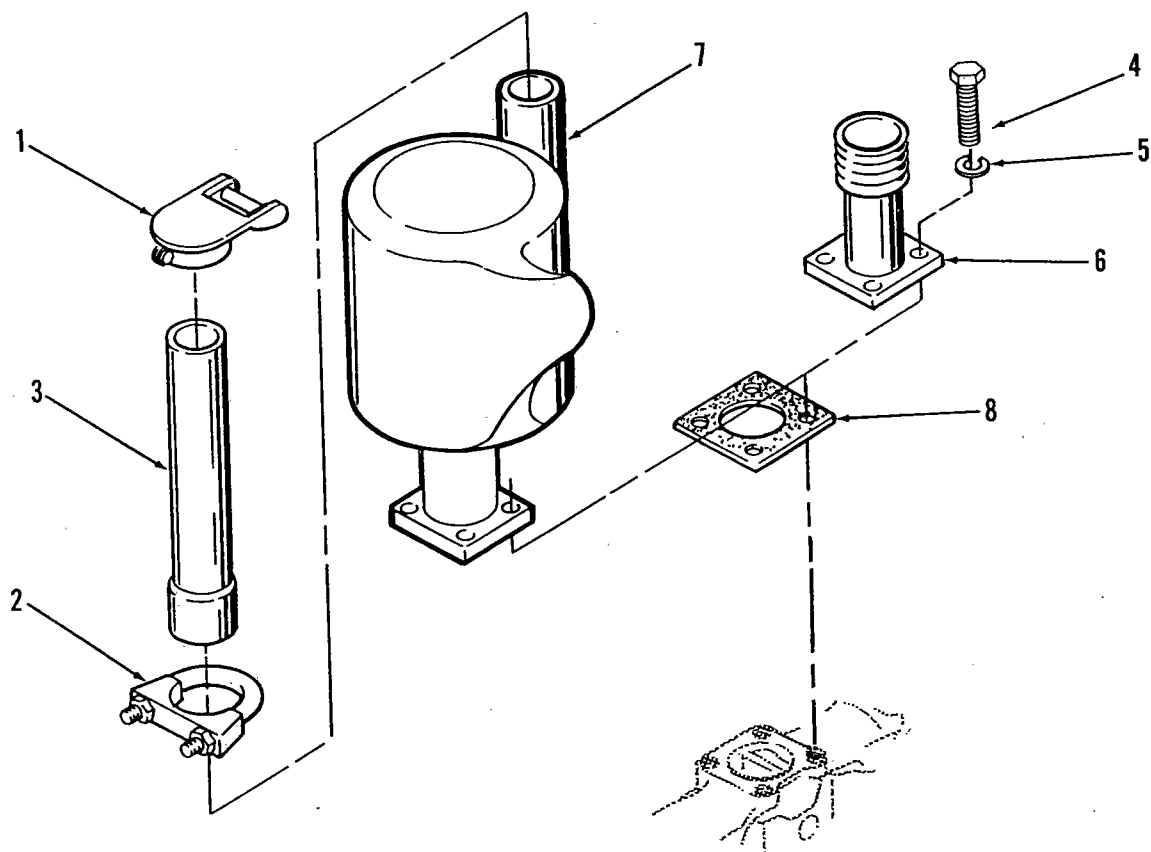
The Engine replacement parts can be ordered from the Cummins Engine Distributer except those parts modified or added during the Gen Set Assembly. When ordering engine parts, refer to the Engine Data plate and supply the Model, Serial, and CPL numbers. For assistance in ordering the Engine replacement parts, contact the nearest Cummins Engine Distributor or the Supplier from whom you purchased the Generator Set.

Engine Components (External)



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	193-0353	1	Sender, Temperature - Oil	22	850-2012	1	Washer, Lock (M12)
2	187-0146	1	Washer, Sealing	23	505-0098	1	Nipple, Close
3	856-0013	3	Washer, Lock - EIT (1/2")	24	102-1147	1	Gasket, Drain - Oil Pan
4	332-2739	1	Bracket Assembly, Terminal	25	102-1237	1	Adapter, Drain - Oil
5	800-2112	1	Screw, Cap - Hex Head (M12-1.75 x 30mm)	26	504-0011	1	Valve, Shutoff
6	309-0554	1	Switch, Temperature	27	505-0185	2	Nipple, Half
7	812-0075	1	Screw, Machine - Round Head (#8-32 x 1/4")	28	503-0197	2	Clamp, Hose
8	850-0025	2	Washer, Lock (#8)	29	503-0098	1	Hose, Drain (6")
9	309-0553	1	Switch, Temperature	30	505-0248	1	Elbow, Pipe - Street
10	800-2060	1	Screw, Cap - Hex Head (M8-1.25 x 35mm)	31	309-0169	1	Switch, Pressure - Oil
11	850-2008	1	Washer, Lock (M8)	32	505-0104	1	Nipple, Pipe - Short
12	309-0269	1	Switch, Temperature	33	505-0059	1	Tee, Pipe - Black
13	193-0375	1	Sender, Temperature	34	193-0244	1	Sender, Pressure - Oil
14	526-0008	2	Washer, Flat (#10)	35	505-0026	1	Coupling, Pipe
15	850-0030	1	Washer, Lock (#10)	36	309-0272	1	Switch, Pressure - Oil
16	871-0010	1	Nut, Cap - Hex Head (#10-32)	38	505-1373	1	Bushing, Reducer
17	416-0446	1	Cable, Battery (9")	39	145-0596	1	Spring, Extension - Throttle
18	332-0941	2	Tie, Cable	40	332-2921	2	Clamp, J
19	416-0619	1	Cable, Battery (18")	41	850-2006	1	Washer, Lock - Spring (M6)
20	416-0893	1	Cable, Battery (10")	42	860-2007	1	Nut, Hex (M6)
21	800-2110	1	Screw, Cap - Hex Head (M12-1.75 x 20mm)	43	871-0028	1	Nut, Hex (3/8-16)
				44	850-0050	1	Washer, lock - Spring (3/8")
				45	501-0441	1	Line, Fuel - Flex (Fuel In)
				46	503-0685	1	Clamp, Hose
				47	501-0502	1	Line, Fuel - Flex (Fuel Out)

Exhaust System **DNBA, DWBA**

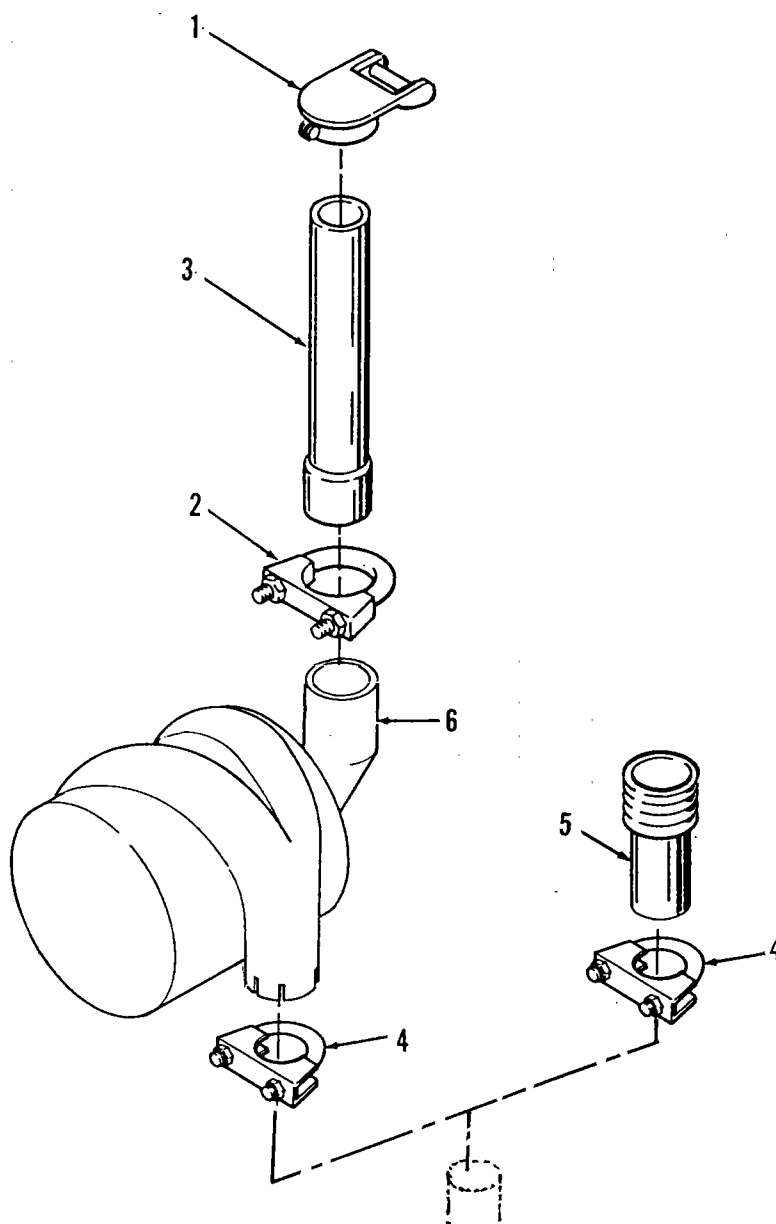


REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	155-2062-01	1	Cap, Rain
2	155-2080	1	Clamp, Muffler
3	154-2581	1	Tube, Exhaust
4	800-2086	4	Screw, Cap - Hex Head (M10-1.5 x 25mm)

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
5	850-2010	4	Washer, Lock - Spring (M10)
6	154-2706	1	Adapter, Exhaust
7	155-2257	1	Silencer
8	154-2708	1	Gasket

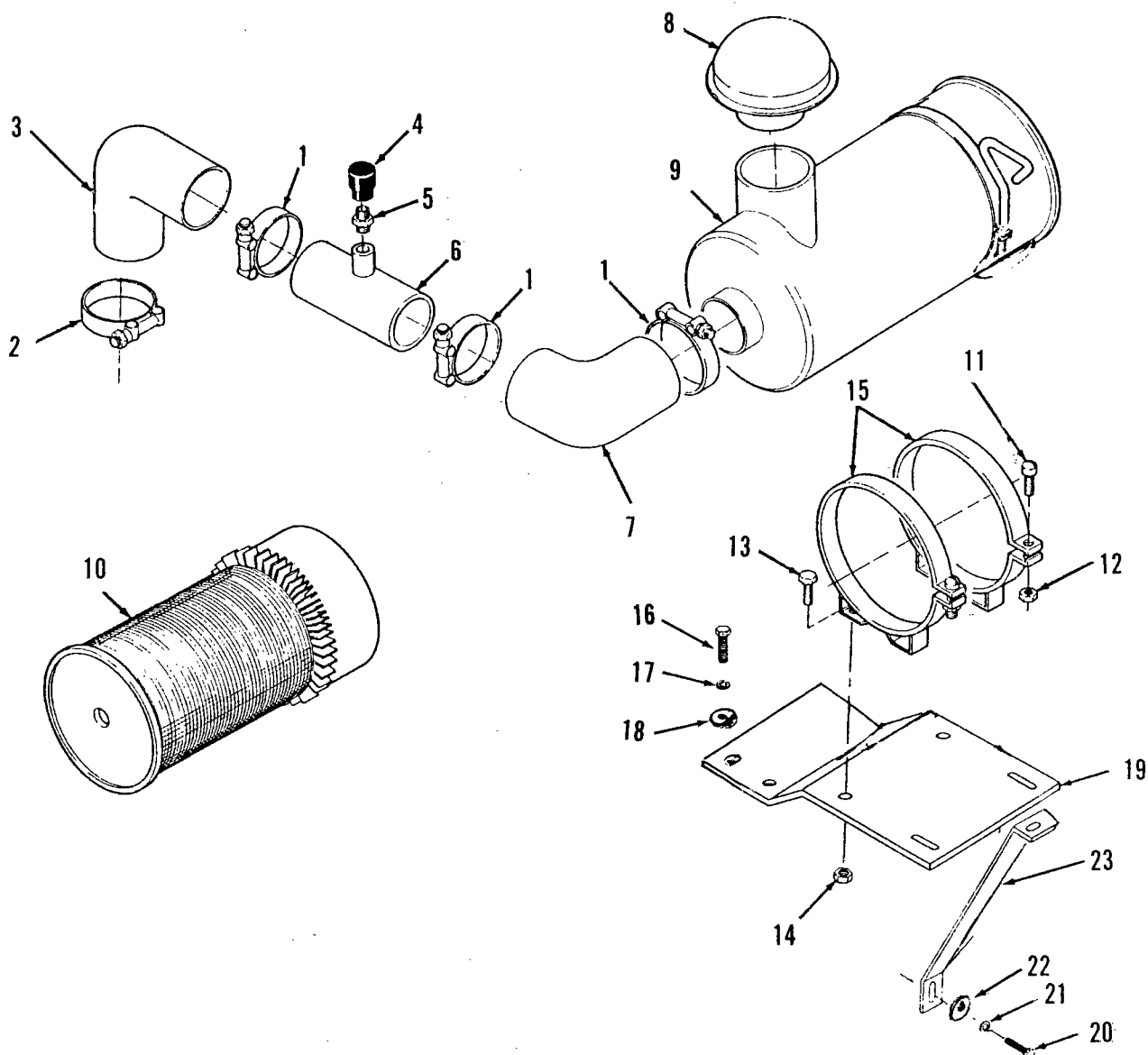
Exhaust System

DNCA, DNCB
DWCA, DWCB



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	155-2062-01	1	Cap, Rain	4	155-2175	1	Clamp, Muffler
2	155-2080	1	Clamp, Muffler	5	154-2253	1	Adapter, Exhaust
3	154-2581	1	Tube, Exhaust	6	155-2256	1	Silencer

Air Cleaner - Standard DNBA, DWBA



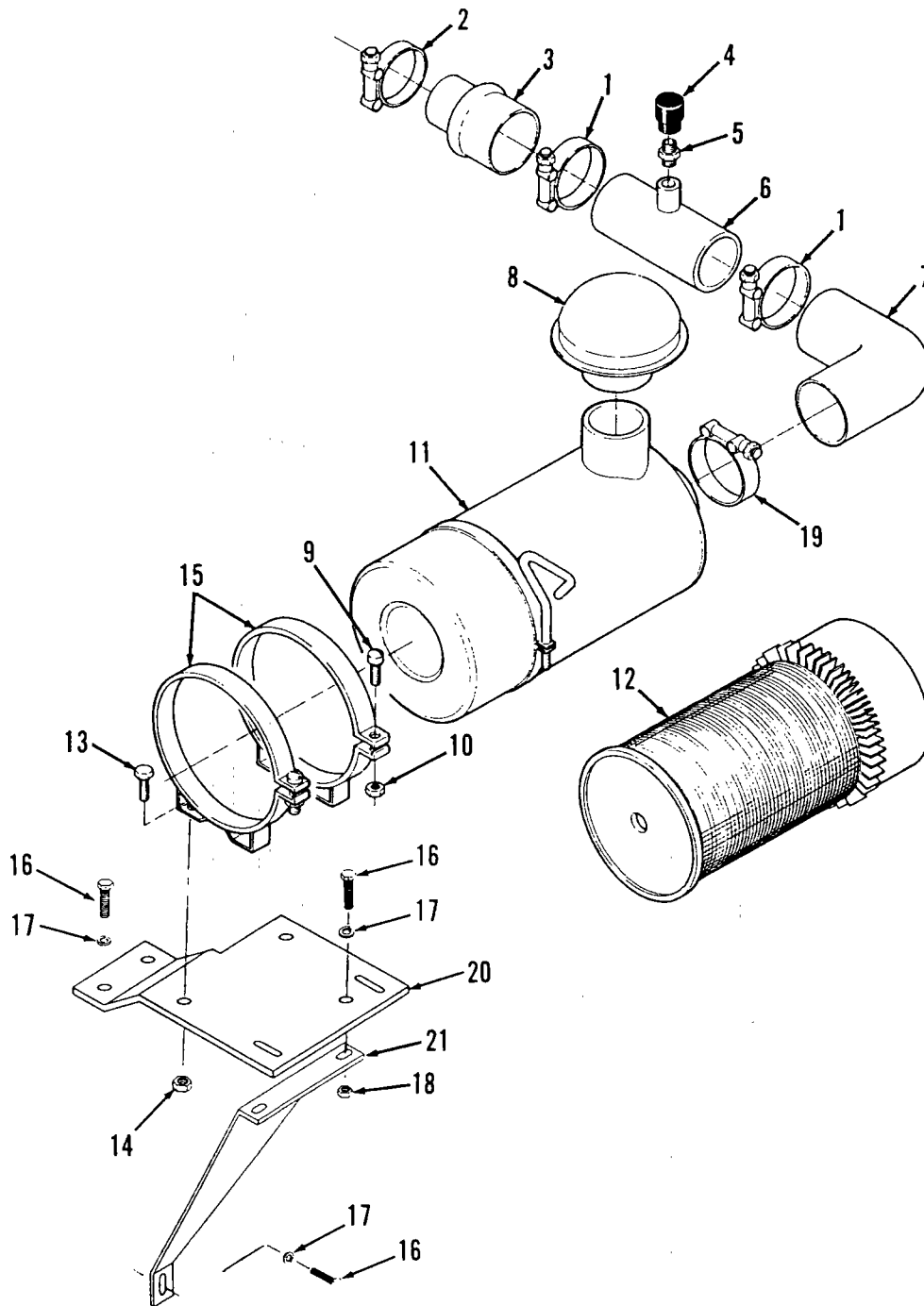
REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	503-0999	3	Clamp, Hose
2	503-0868	1	Clamp, Hose
3	503-1520	1	Elbow, Reducing
4	140-1548	1	Indicator, Service
5	140-1260	1	Adapter, Indicator
6	140-2177	1	Tube, Inlet - Air
7	140-1864	1	Elbow
8	140-2157	1	Cap, Air Cleaner
9	140-2158	1	Cleaner, Air (Includes Element)
10	140-2159	1	Element, Air Cleaner
11	815-0115	2	Screw, Machine - Filister Head (1/4-20 x 1")
12	863-0002	2	Nut, Square (1/4-20)

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
13	821-0029	4	Screw, Self-locking - Hex Head (3/8-16 x 3/4")
14	870-0281	4	Nut, Self-locking - Hex (3/8-16)
15	140-0078	2	Band, Cleaner - Air
16	800-2084	2	Screw, Cap - Hex Head (M10 x 1.5 x 16mm)
17	850-2010	2	Washer, Lock (M10)
18	526-2120	2	Washer, Flat (M10)
19	140-2178	1	Bracket, Mounting
20	800-2110	1	Screw, Cap - Hex Head (M12 x 1.75 x 20mm)
21	850-2012	1	Washer, Lock (M12)
22	526-2140	1	Washer, Flat (M12)
23	140-2179	1	Brace, Mounting

Air Cleaner - Standard

DNCA, DNCB

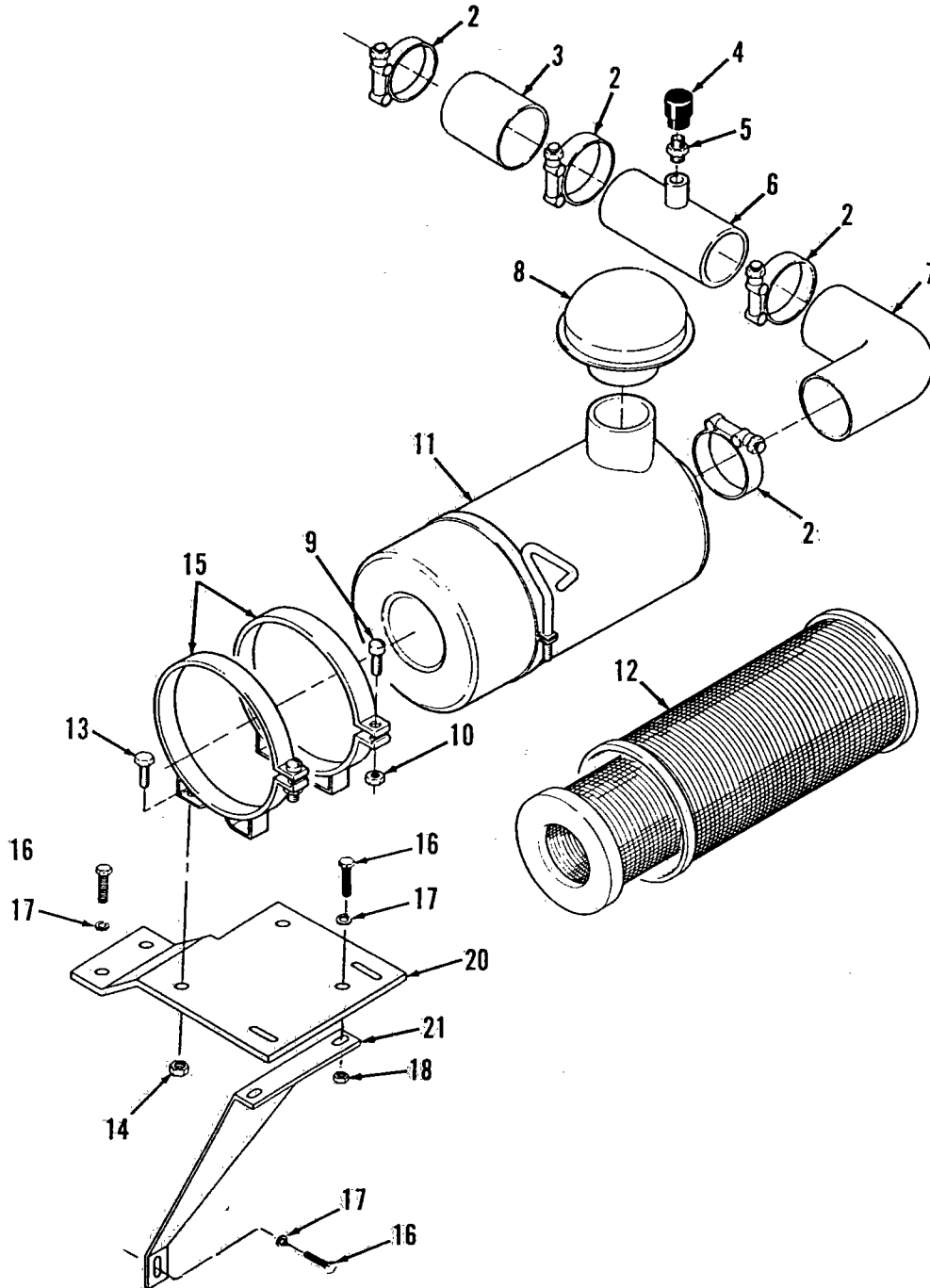
DWCA, DWCB



REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	503-0998	2	Clamp, Hose
2	503-0868	1	Clamp, Hose
3	503-1543	1	Hose, Reducing
4	140-1548	1	Indicator, Service
5	140-1260	1	Adapter, Indicator
6	140-2166	1	Tube, Inlet - Air
7	503-1542	1	Elbow, Hose - Reducing
8	140-2157	1	Cap, Air Cleaner
9	815-0115	2	Screw, Machine - Fillister Head (1/4-20 x 1")
10	863-0002	2	Nut, Square (1/4-20)
11	140-2158	1	Cleaner, Air (Includes Element)

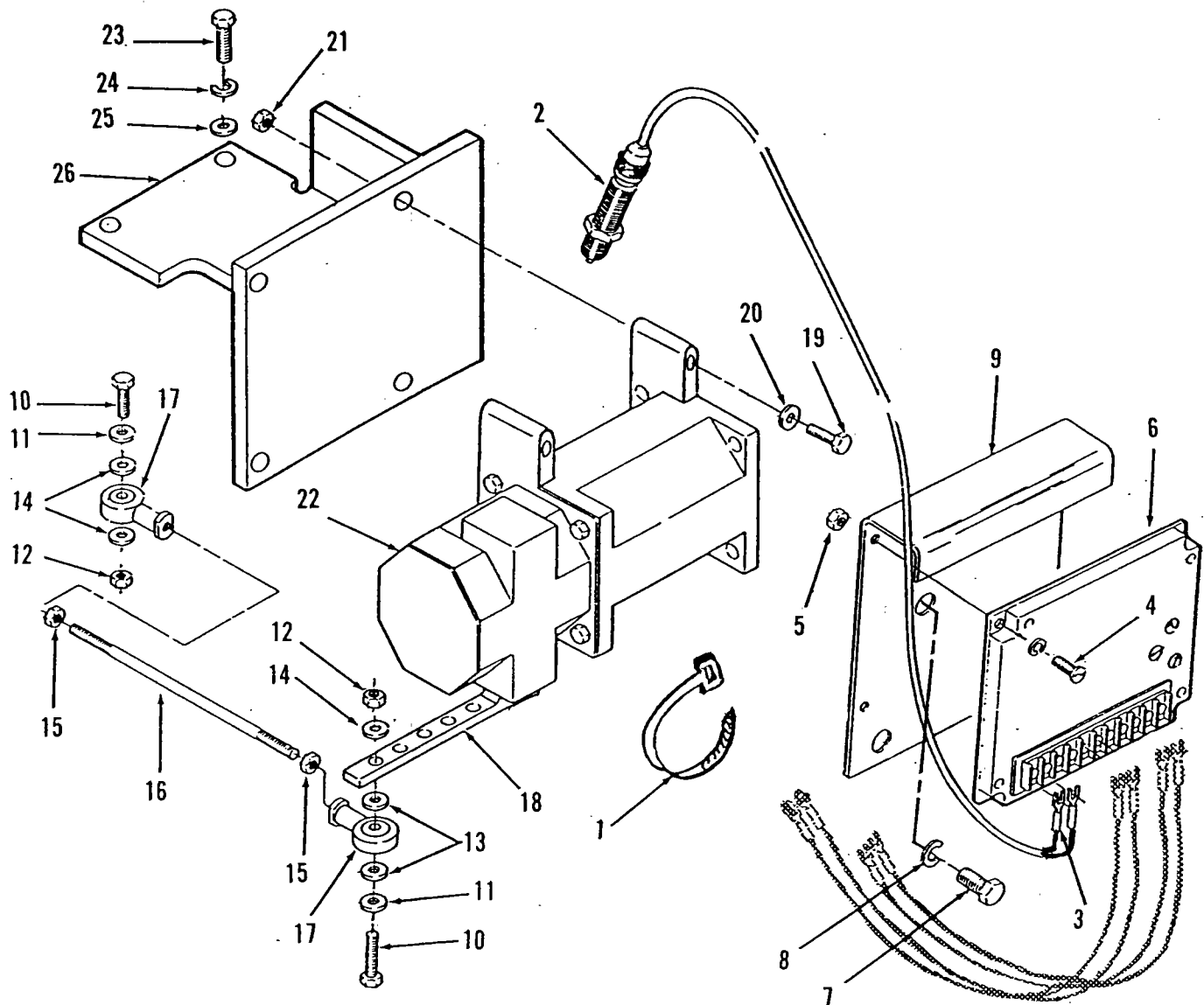
REF NO.	PART NO.	QTY USED	PART DESCRIPTION
12	140-2159	1	Element, Air Cleaner
13	821-0029	4	Screw, Self-locking - Hex Head (3/8 - 16 x 3/4")
14	870-0281	4	Nut, Lock (3/8-16)
15	140-0078	2	Band, Mounting
16	800-2110	4	Screw, Cap - Hex Head (M12 x .8 x 20mm)
17	850-2012	4	Washer, Lock - Spring (M12)
18	750-1010	1	Nut, Hex (M12)
19	503-0999	1	Clamp, Hose
20	140-2164	1	Bracket, Mounting
21	140-2163	1	Brace, Mounting

Air Cleaner - Heavy Duty
DNCA, DNCB
DWCA, DWCB



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
2	503-0868	4	Clamp, Hose	12	140-2161	1	Element, Air Cleaner Primary
3	503-1460	1	Hose, Reducing		140-2162	1	Element, Air Cleaner Secondary
4	140-1548	1	Indicator, Service	13	821-0016	4	Screw, Self-locking - Hex Head (5/16-18 x 3/4")
5	140-1260	1	Adapter, Indicator	14	870-0257	4	Nut, Lock (5/16-18)
6	140-2168	1	Tube, Inlet - Air	15	140-0317	2	Band, Mounting
7	503-1467	1	Elbow, Reducing	16	800-2110	4	Screw, Cap - Hex Head (M12 x .8 x 20mm)
8	140-1435	1	Cap, Air Cleaner	17	850-2012	4	Washer, Lock - Spring (M12)
9	815-0115	2	Screw, Machine - Fillister Head (1/4-20 x 1")	18	750-1010	1	Nut, Hex (M12)
10	863-0002	2	Nut, Square, (1/4-20)	20	140-2164	1	Bracket, Mounting
11	140-2160	1	Cleaner, Air (Includes Element)	21	140-2163	1	Brace, Mounting

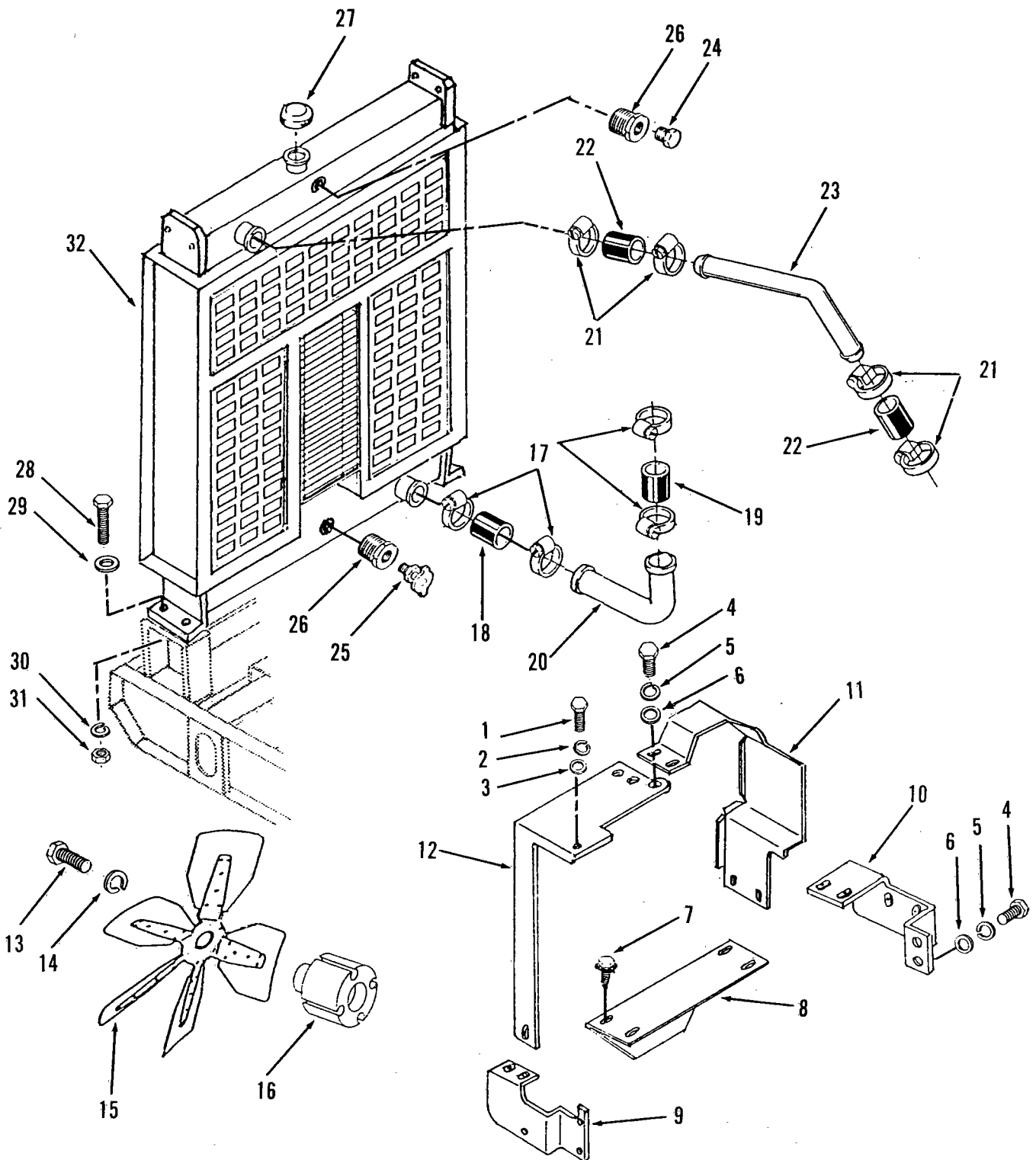
Electronic Governor



REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	332-1445	5	Tie, Cable
2	150-2201	1	Sensor, Speed - Includes Leads, Less Terminals
3			Terminal, Electrical (For all Electrical Leads)
	332-1279	8	Spade, #6
	332-0325	1	Ring, #10
	332-1087	1	Ring, 1/2"
4	813-0103	4	Screw, Machine - Round Head (#10-32 x 3/4")
5	870-0131	4	Nut, Hex - W/ET (#10-32) (Not used all installations)
6	151-0611	1	Control, Governor
7	800-2110	2	Screw, Cap - Hex Head (M12 x 1.75 x 20mm)
8	850-2012	2	Washer, Flat (M12)
9	150-2007	1	Bracket, Mounting
10	815-0172	2	Screw, Machine - Hex Head (#10-32 x 1")

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
11	526-0327	2	Washer, Flat (13/64)
12	870-0131	2	Nut, Hex - W/ET (#10-32)
13	526-0008	2	Washer, Flat (#10)
14	526-0196	3	Washer, Flat - Aluminum
15	870-0053	2	Nut, Hex (#10-32)
16	150-2218-01	1	Rod - Governor
17	150-2200	2	Joint, Ball
18	150-2203	1	Lever, Actuator - Governor
19	800-0012	4	Screw, Cap - Hex Head (1/4-20 x 2 1/4")
20	526-0018	4	Washer, Flat (1/4)
21	870-0212	4	Nut, Self-locking - Hex (1/4-20)
22	151-0632	1	Actuator, Governor (24VDC)
23	800-2060	3	Screw, Cap - Hex Head (M8 x 1.25 x 35mm)
24	850-2008	3	Washer, Lock (M8)
25	526-0115	3	Washer, Flat (M8)
26	150-2187	1	Bracket, Governor

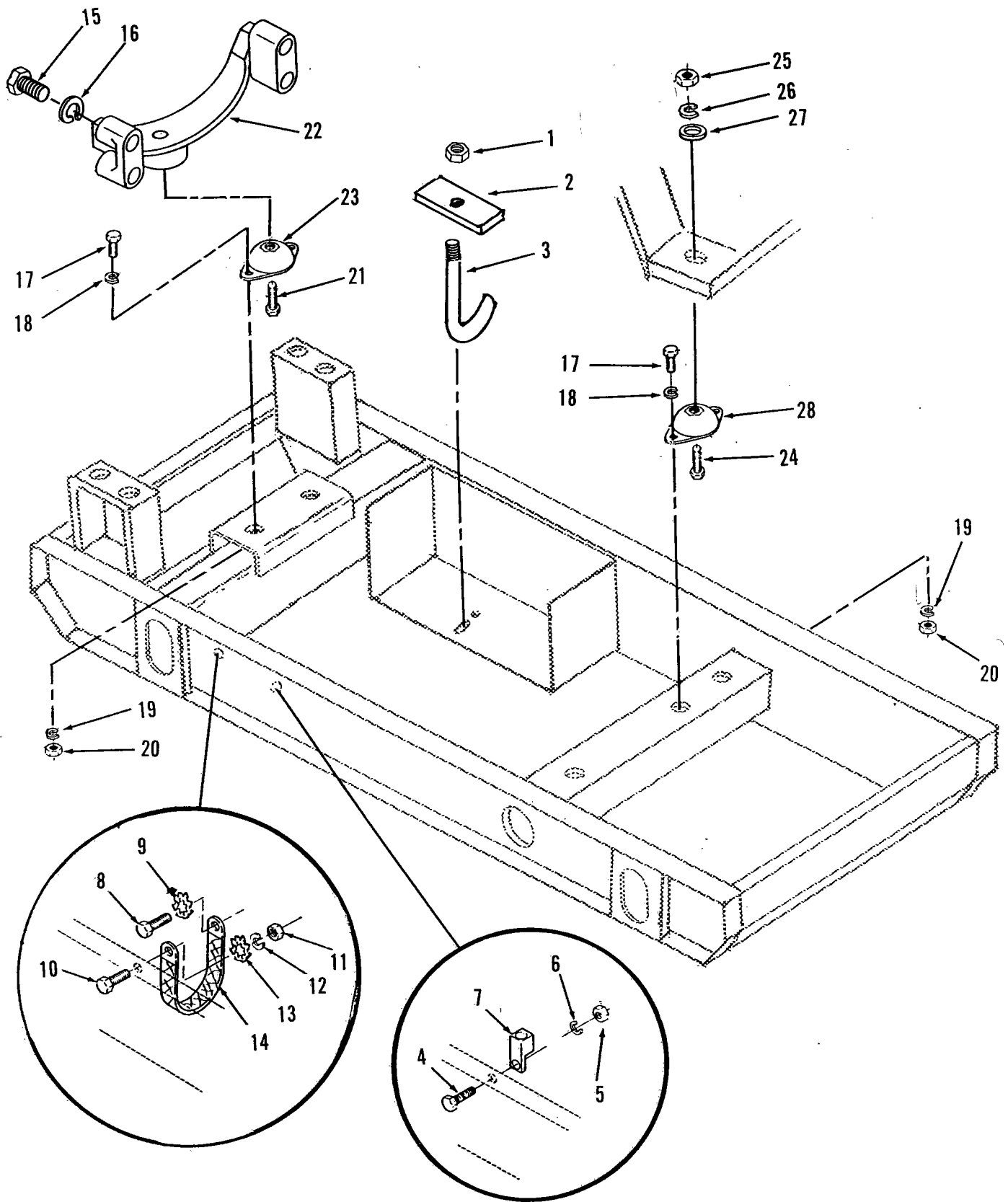
Cooling System (Radiator)



Cooling System (Radiator)

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	800-2084	1	Screw, Cap - Hex Head (M10 x 1.5 x 16mm)	15	130-3116	1	Fan, Radiator
2	526-2120	1	Washer, Flat (M10)	16	130-3114	1	Spacer, Fan
3	850-2010	1	Washer, Lock - Spring (M10)	17	503-0354	4	Clamp, Hose
4	800-2110	5	Screw, Cap - Hex Head (M12 x 1.75 x 20mm)	18	503-1379-02	1	Hose, Radiator
5	526-2140	5	Washer, Flat (M12)	19	503-1379-03	1	Hose, Radiator
6	850-2012	5	Washer, Lock - Spring (M12)	20		1	Tube, Outlet - Radiator
7	821-0009	9	Screw, Self-locking - Hex (1/4-20 x 3/8")	21	503-0365	4	Clamp, Hose
8	130-3121	1	Plate, Bottom	22	503-1391-01	2	Hose, Radiator
9	130-3122	1	Guard, Belt (Right Side)	23		1	Tube, Inlet - Radiator
10	130-3123	1	Guard, Belt (Left Side)	24	502-0153	1	Plug, Hex Head (1/4 NPT)
11	130-3127	1	Guard, Belt - Alternator	25	504-0003	1	Cock, Drain
12	130-3126	1	Guard, Belt - Alternator	26	502-1033	2	Adapter, Metric To NPT
13	718-1044	4	Screw, Cap - Hex Head (M8 x 1.25 x 60mm)	27		1	Cap, Radiator
14	850-2008	4	Washer, Lock - Spring (M8)	28	800-0028	4	Screw, Cap - Hex Head (5/16-18 x 1")
				29	526-0022	4	Washer, Flat (5/16)
				30	850-0045	4	Washer, Lock - Spring (5/16)
				31	862-0015	4	Nut, Hex (5/16-18)
				32	130-3277	1	Radiator

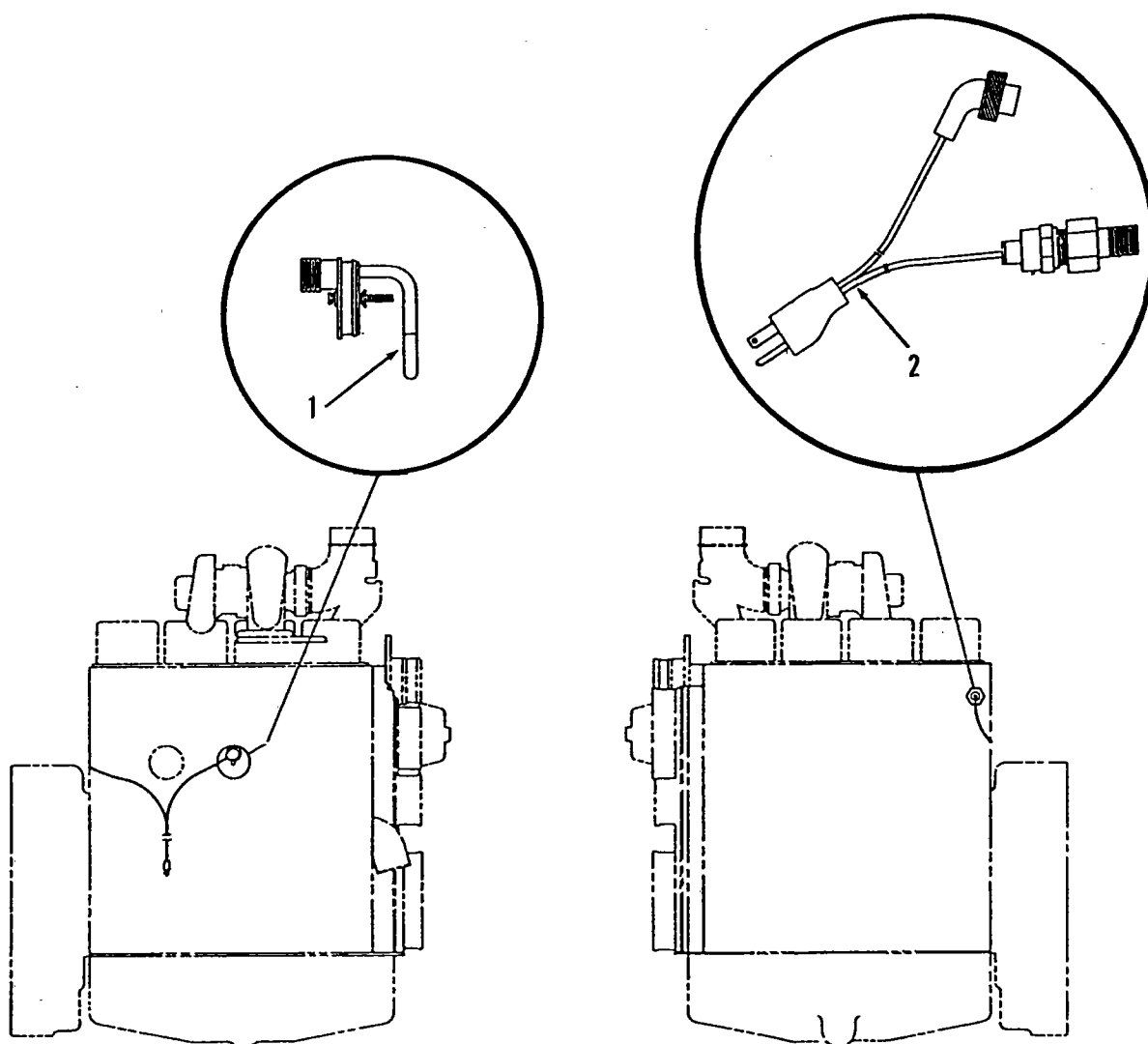
Chassis



Chassis

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	870-0212	1	Nut, Lock (1/4-20)	15	800-2120	4	Screw, Cap - Hex Head (M12 x 1.75 x 70mm)
2	416-0854	1	Bracket, Mounting - Battery	16	850-2012	5	Washer, Lock (M12)
3	416-0853	1	Holddown, Battery	17	800-0092	6	Screw, Cap - Hex Head (1/2-13 x 1-1/2")
4	800-0026	1	Screw, Cap - Hex Head (5/16-18 x 3/4")	18	850-0060	6	Washer, Lock - Spring (1/2")
5	856-0008	1	Washer, Lock - EIT (5/16)	19	526-0219	6	Washer, Flat (1/2")
6	870-0257	1	Nut, Lock (5/16-18)	20	862-0016	6	Nut, Hex (1/2-13)
7	332-1473	1	Lug, Solderless	21	800-0520	3	Screw, Cap - Hex Head (3/4-10 x 1")
8	800-2111	1	Screw, Cap - Hex Head (M12 x 1.75 x 25mm)	22	403-2567	1	Support, Engine
9	856-0013	1	Washer, Lock - EIT (1/2")	23	402-0568	1	Mout, Vibration
10	800-0092	1	Screw, Cap - Hex Head (1/2-13 x 1-1/2")	24	800-0092	2	Screw, Cap - Hex Head (1/2-13 x 1-1/2")
11	862-0016	1	Nut, Hex (1/2-13)	25	862-0016	2	Nut, Hex (1/2-13)
12	850-0060	1	Washer, Lock - Spring (1/2")	26	850-0060	2	Washer, Lock - Spring (1/2")
13	856-0013	1	Washer Lock - EIT (1/2")	27	526-0219	2	Washer, Flat (1/2)
14	337-0090	1	Strap, Electrical	28	402-0466	2	Mount, Vibration

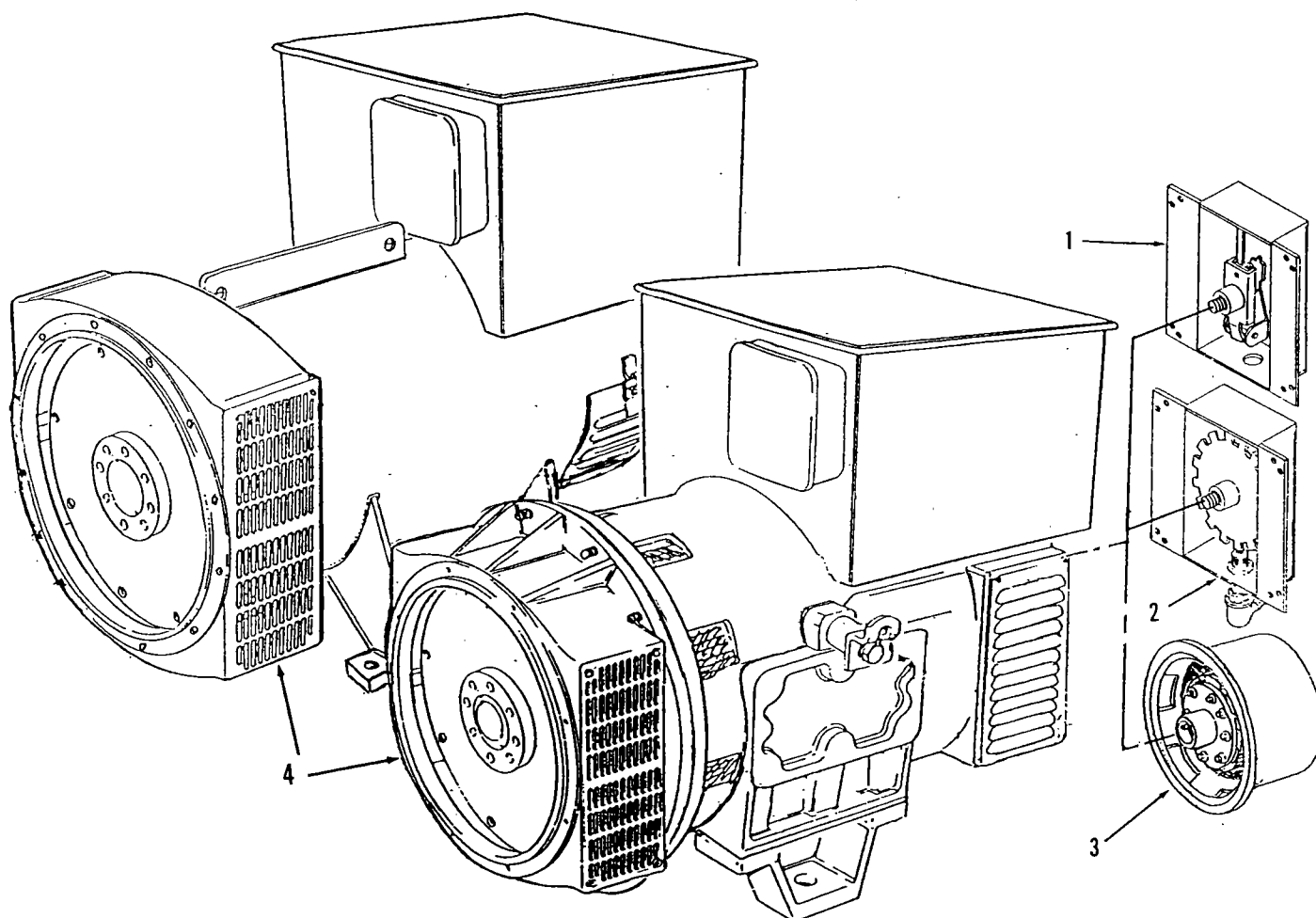
Engine Coolant Heater



REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1			Heater, Engine Coolant
	333-0291-01	1	120 VAC
	333-0291-02	1	240 VAC

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
2			Cable, Electrical (Includes Thermostat Switch)
	333-0292-01	1	120 VAC
	333-0292-02	1	240 VAC

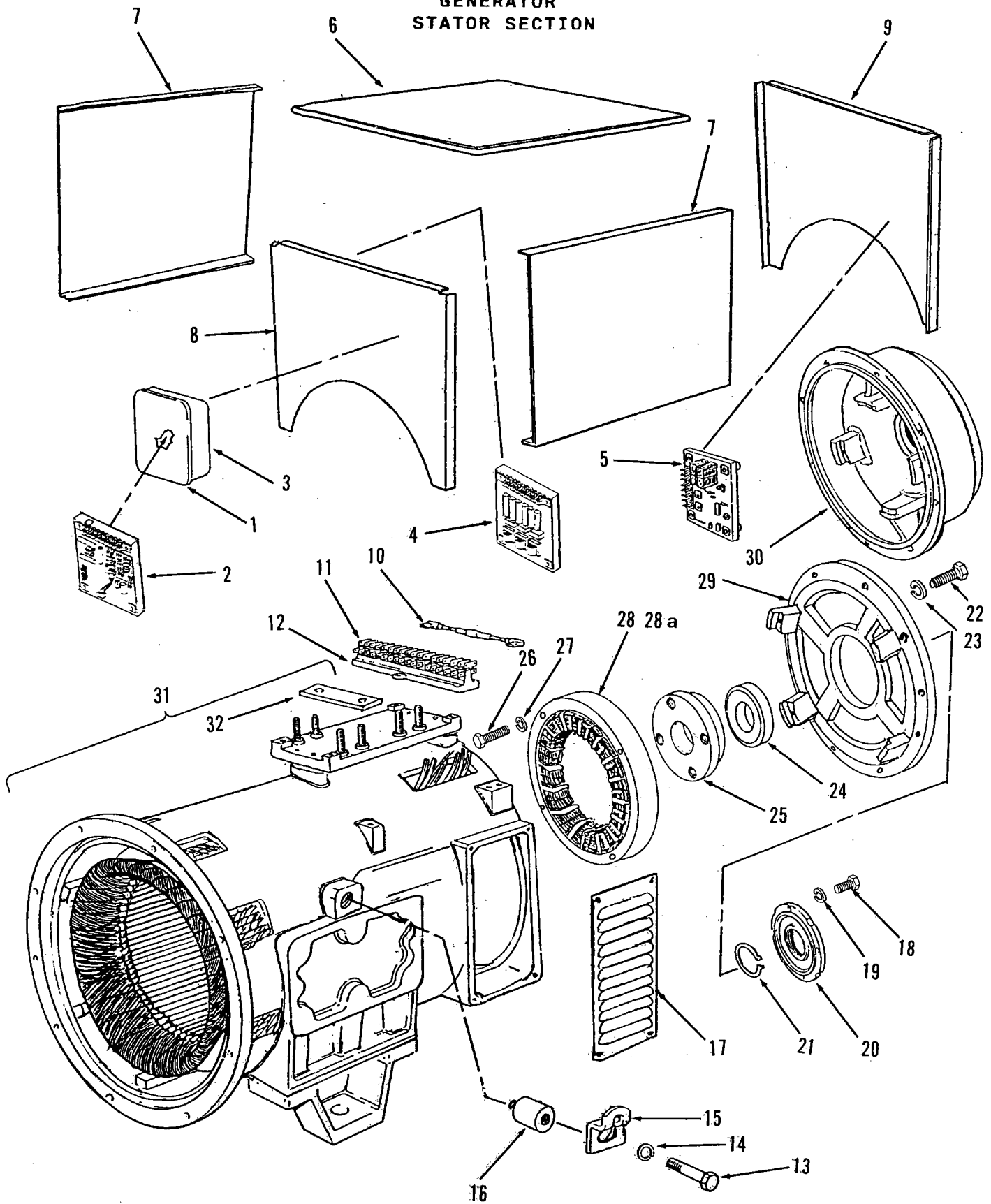
GENERATOR



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1		1	Module, Overspeed Switch (See Separate Page for Components)	4	Note 1		Generator (See Separate Pages for Stator and Rotor Components)
	821-2045	4	Attaching Parts Screw, Self-locking - Hex Hd (M8 x 1.25 x 16mm)				Attaching Parts Generator to Chassis (Quantity four each may be required for some Extended Stack Sets)
2		1	Module, Overspeed Sensor (See Separate Page for Components)		800-0092	2	Screw, Cap - Hex Head (1/2-13 x 1-1/2")
	821-2045	4	Attaching Parts Screw, Self-locking - Hex Hd (M8 x 1.25 x 16mm)		850-0060	2	Washer, Lock - Spring (1/2")
					526-0219	2	Washer, Flat (1/2")
3		1	Module, Permanent Magnet Exciter (See Separate Page for Components)		862-0016	2	Nut, Hex (1/2-13)
			Attaching Parts		800-2088	12	Adapter to Flywheel Housing Screw, Cap - Hex Head (M10 x 1.5 x 35mm)
	249-0298	4	Screw, Cap - Hex Head (M8 x 16mm)		850-2010	12	Washer, Lock - Spring (M10)
	249-0218	4	Washer, Lock (M8)		805-0015	8	Drive Disc to Flywheel Bolt - Hex Head (3/8-16 x 3/4", Grade 8)
	249-0315	4	Clamp, Retaining		526-0124	8	Washer, Flat (1-1/2"OD x 13/32"ID)

Note 1: For replacement Generator please supply the complete Gen Set nameplate and Generator nameplate data. The Replacement Generator will be shipped from closest warehouse or the factory. The replacement will not include PMG Exciter Module, Generator to Flywheel Housing Adapter, Drive Discs and Terminal Box.

GENERATOR STATOR SECTION

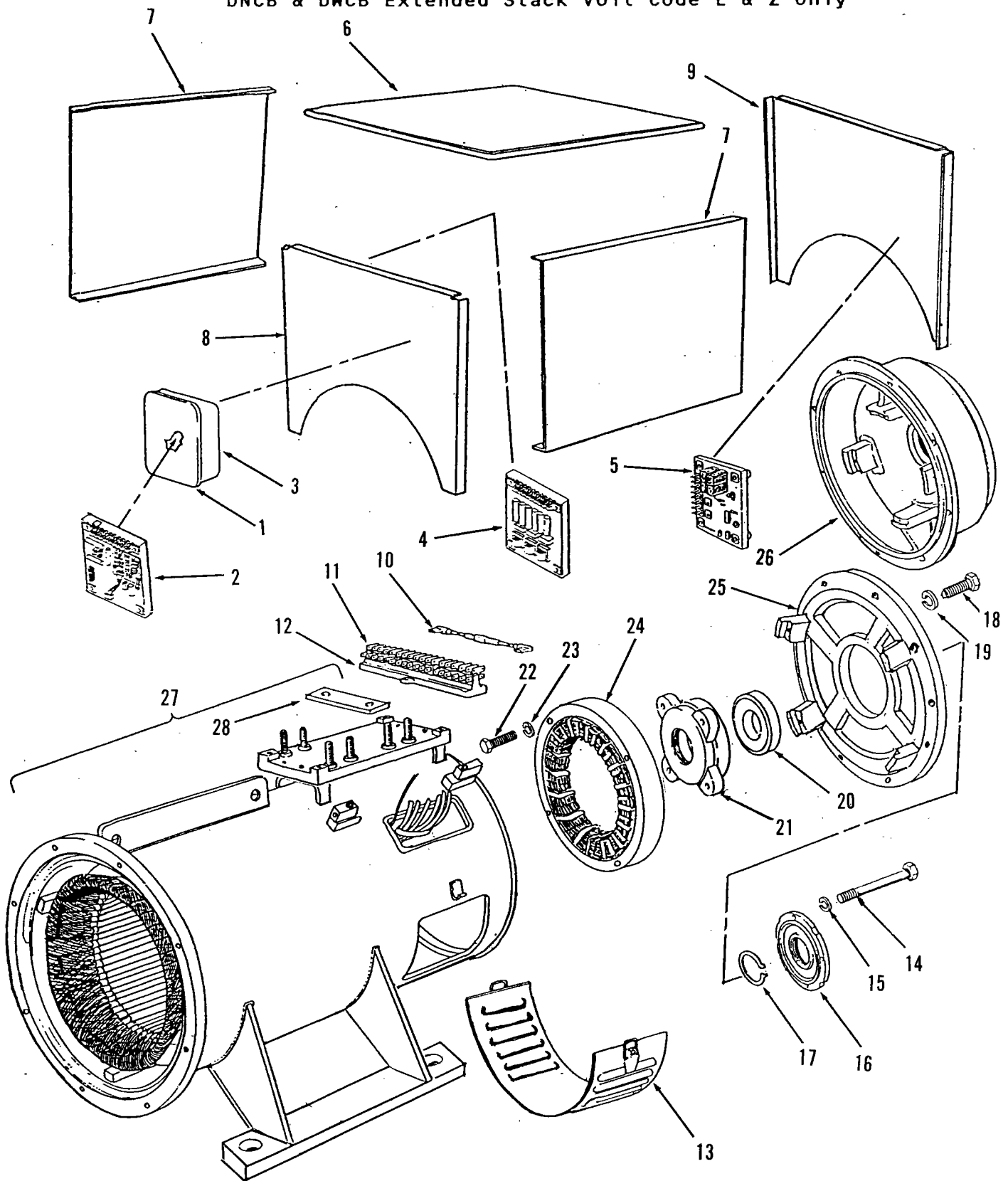


Generator Stator Section

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	249-0401	1	Lid	23	249-0218	6	Washer, Lock - Spring (M8)
			Attaching Parts	24	249-0311	1	Bearing, Ball
	249-0304	4	Screw, Captive	25	249-0317	1	Cap, Bearing - Inner
2			Regulator, Voltage	26			Screw, Cap - Hex Head
	305-0779	1	Standard				(Select length as required)
	305-0778	1	3 Phase (Used with		249-0296	4	M6 x 45mm
			PMG Exciter & 3 Phase		249-0297	4	M6 x 55mm
			Sensing Module)	27	249-0212	4	Washer, Lock - Spring (M6)
			Attaching Parts	28	249-0333	1	Stator, Exciter
	249-0398	4	Pillar, Threaded				DNBA, DWBA Volt Codes H,L,Z
3	249-0564	1	Module, 3 Phase Sensing				DNBA, DWBA Voltage Code H
			Attaching Parts				with Extended Stack
	249-0398	4	Pillar, Threaded				DNCA, DWCA Volt Codes H,L,Z
4	249-0395	1	Box				DNCB, DWCB Voltage Code H
5	300-3209-02	1	Module, Frequency Detection	28a	249-0334	1	Stator, Exciter
			Attaching Parts				DNBA, DWBA Volt Codes L,Z
	249-0295	4	Screw, Cap - Hex Head				with Extended Stack
			(M5 x 35mm)				DNCA, DWCA Volt Codes H,L,Z
	249-0288	4	Washer, Plastic (M5)				with Extended Stack
	249-0287	4	Nut, Hex - Nylon (M5)				DNCB, DWCB Volt Codes L,Z
6	NFS	1	Lid				DNCB, DWCB Volt Code H
7	NFS	2	Panel, Side				with Extended Stack
8	NFS	1	Panel, Front	29	249-0324	1	Bracket, End
9	NFS	1	Panel, Rear				DNBA, DWBA Volt Codes H,L,Z
10	249-0428	1	Resistor (Voltage Code				DNBA, DWBA Voltage Code H
			H Only)				with Extended Stack
11	249-0289	3	Block, Terminal				DNCA, DWCA Volt Codes H,L,Z
12	249-0424	1	Base, Terminal				DNCB, DWCB Voltage Code H
13	249-0303	2	Screw, Cap - Hex Head	30	249-0325	1	Bracket, End
			(M12 x 55mm)				DNBA, DWBA Volt Codes L,Z
14	249-0205	2	Washer, Lock - Spring (M12)				with Extended Stack
15	249-0318	2	Lug, lifting				DNCA, DWCA Volt Codes H,L,Z
16	249-0329	2	Spacer, Sleeve				with Extended Stack
17	249-0319	2	Grille, Inlet - Air				DNCB, DWCB Volt Codes L,Z
			Attaching Parts				DNCB, DWCB Volt Code H
	249-0294	8	Screw, Cap - Hex Head				with Extended Stack
			(M5 x 12mm)	31	NFS	1	Stator, Generator (Includes
	249-0307	8	Washer, lock - Spring (M5)				Terminal Studs and Links)
	249-0308	8	Washer, Flat (M5)				Attaching Parts Stator to
18	249-0301	3	Screw, Cap - Hex Head				Adapter
			(M8 x 60mm)		249-0300	8	Screw, Cap - Hex Head
19	249-0218	3	Washer, Lock - Spring (M8)				(M8 x 30mm)
20	249-0326	1	Cap, Bearing - Outer		249-0218	8	Washer, Lock - Spring (M8)
21	249-0309	1	Circlip	32	249-0403	4	Link, Terminal
22	249-0299	6	Screw, Cap - Hex Head				
			(M8 x 25mm)				

NFS - Not For Sale

Generator
Stator Section
DNCB & DWCB Extended Stack Volt Code L & Z Only

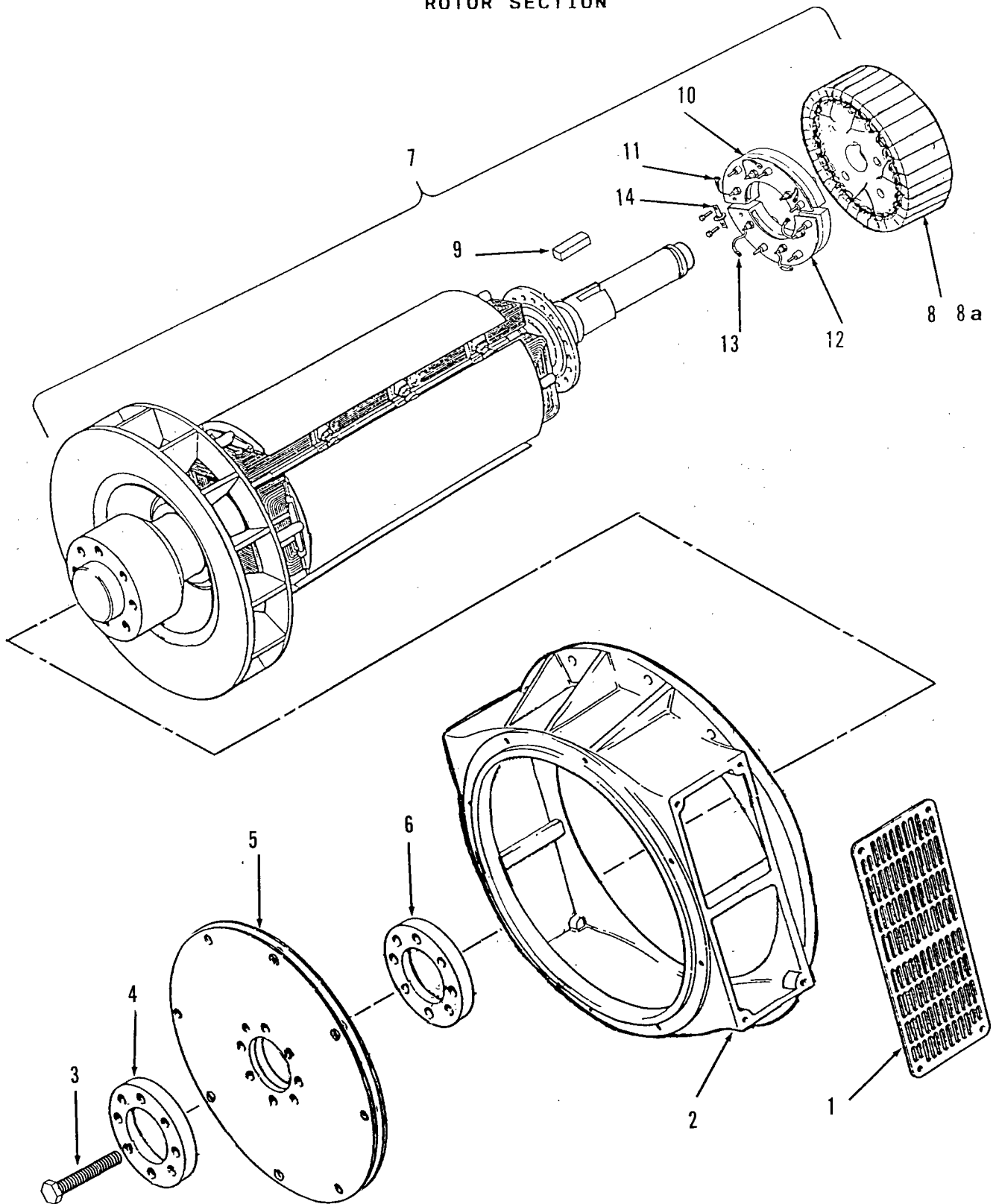


**Generator
Stator Section
DNCB & DWCB Extended Stack Volt Code L & Z Only**

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	249-0401	1	Lid	11	249-0289	3	Block, Terminal - AUX
	249-0304	4	Attaching Parts Screw, Captive	12	249-0424	1	Base, Terminal - AUX
2			Regulator, Voltage	13	249-0368	2	Grille, Inlet - Air
	305-0779	1	Standard	14	249-0302	4	Screw, Cap - Hex Head (M10 x 65mm)
	305-0778	1	3 Phase (Used with PMG Exciter & 3 Phase Sensing Module)	15	249-0202	4	Washer, Lock - Spring (M10)
			Attaching Parts	16	249-0362	1	Cap, Bearing - Outer
	249-0398	4	Pillar, Threaded	17	249-0444	1	Circlip
3	249-0564	1	Module, 3 Phase Sensing	18	249-0201	8	Screw, Cap - Hex Head (M10 x 35mm)
			Attaching Parts	19	249-0202	8	Washer, Lock - Spring (M10)
	249-0398	4	Pillar, Threaded	20	249-0312	1	Bearing, Ball
4	249-0395	1	Box	21	249-0361	1	Cap, Bearing - Inner
5	300-3209-02	1	Module, Frequency Detection	22	249-0297	4	Screw, Cap - Hex Head (M6 x 55mm)
			Attaching Parts	23	249-0212	4	Washer, Lock - Spring (M6)
	249-0295	4	Screw, Cap - Hex Head (M5 x 35mm)	24	249-0334	1	Stator, Exciter
	249-0288	4	Washer, Plastic (M5)	25	249-0354	1	Bracket, End
	249-0287	4	Nut, Hex - Nylon (M5)	27	NFS	1	Stator, Generator (Includes Terminal Studs and Links)
6	NFS	1	Lid				Attaching Parts Stator to Adapter
7	NFS	2	Panel, Side		249-0201	8	Screw, Cap - Hex Head (M10 x 35mm)
8	NFS	1	Panel, Front		249-0202	8	Washer, Lock - Spring (M10)
9	NFS	1	Panel, Rear	28	249-0404	4	Link, Terminal
10	249-0428	1	Resistor (Voltage Code H Only)				

NFS - Not For Sale

GENERATOR
ROTOR SECTION

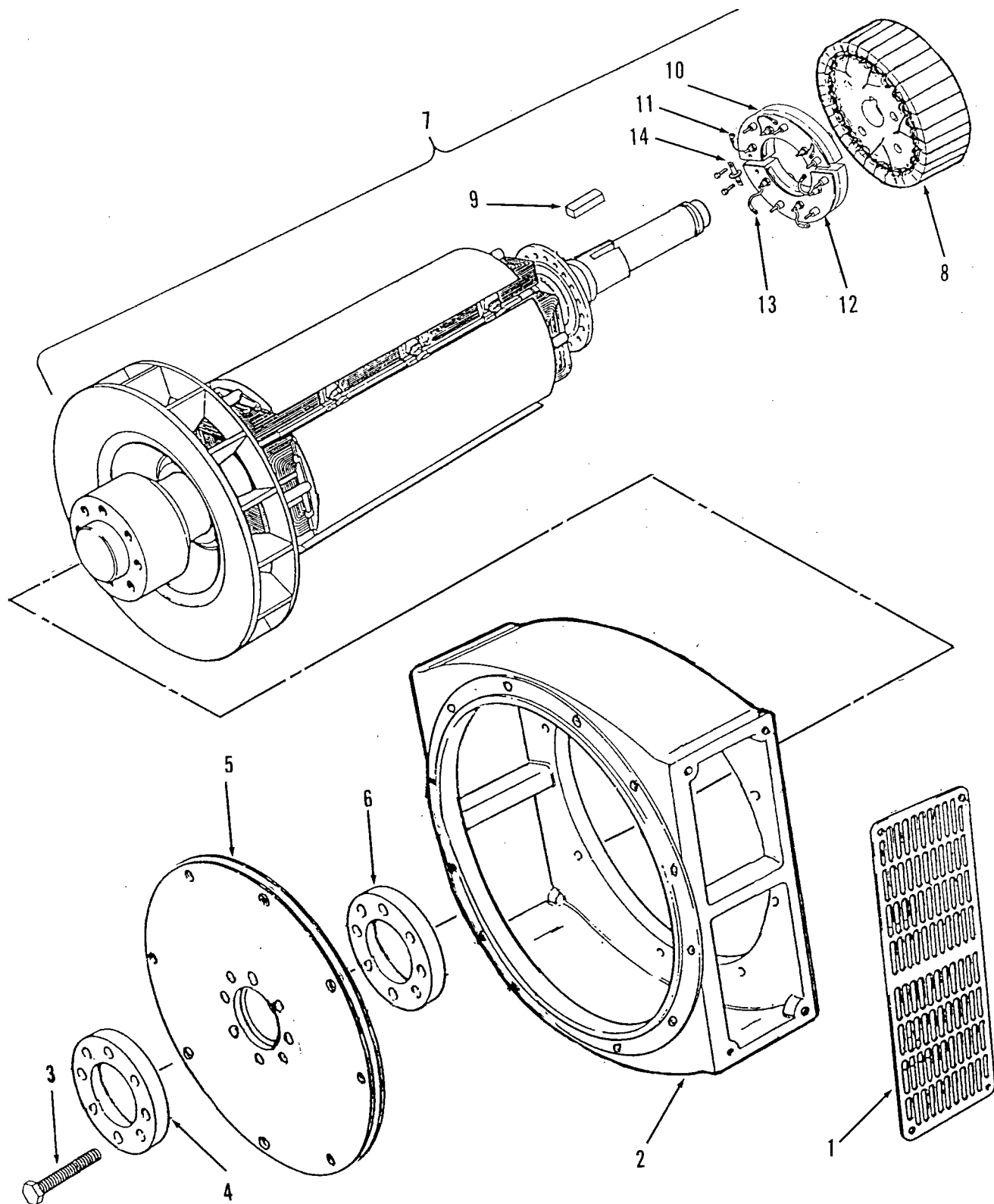


Generator Rotor Section

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	249-0338	2	Screen, Air - Adapter	8a	249-0336	1	Rotor, Exciter (Does Not Include Rectifier Assy)
	249-0294	8	Attaching Parts Screw, Cap - Hex Head (M5 x 12mm)				DNBA, DWBA Volt Codes L,Z with Extended Stack
	249-0307	8	Washer, Lock - Spring (M5)				DNCA, DWCA Volt Codes H,L,Z with Extended Stack
	249-0308	8	Washer, Flat (M5)				DNCB, DWCB Volt Codes L,Z with Extended Stack
2	249-0337	1	Adapter, Generator				DNCB, DWCB Volt Code H
3	249-0290	8	Screw, Cap - Hex Head (M16 x 75mm)	9	249-0271	1	Key
4	249-0402	1	Plate, Pressure	10	249-0340	1	Rectifier Assy, Forward (Includes Item 11 Diodes)
5	249-0327	2	Disc, Drive	11	249-0281	1	Set, Forward Polarity Diode
6	249-0320	1	Spacer	12	249-0341	1	Rectifier Assy, Reverse (Includes Item 13 Diodes)
7	NFS	1	Rotor, Generator (Includes Exciter, Key, and Rectifier Assemblies)	13	249-0282	1	Set, Reverse Polarity Diode
8	249-0335	1	Rotor, Exciter (Does Not Include Rectifier Assy) DNBA, DWBA Volt Codes H,L,Z DNBA, DWBA Voltage Code H with Extended Stack DNCA, DWCA Volt Codes H,L,Z DNCB, DWCB Voltage Code H	14	249-0283	1	Varister
					249-0294	2	Attaching Parts Screw, Cap - Hex Head (M5 x 12mm)

NFS - Not For Sale

Generator
Rotor Section
DNCB & DWCB Extended Stack Volt Code L & Z Only

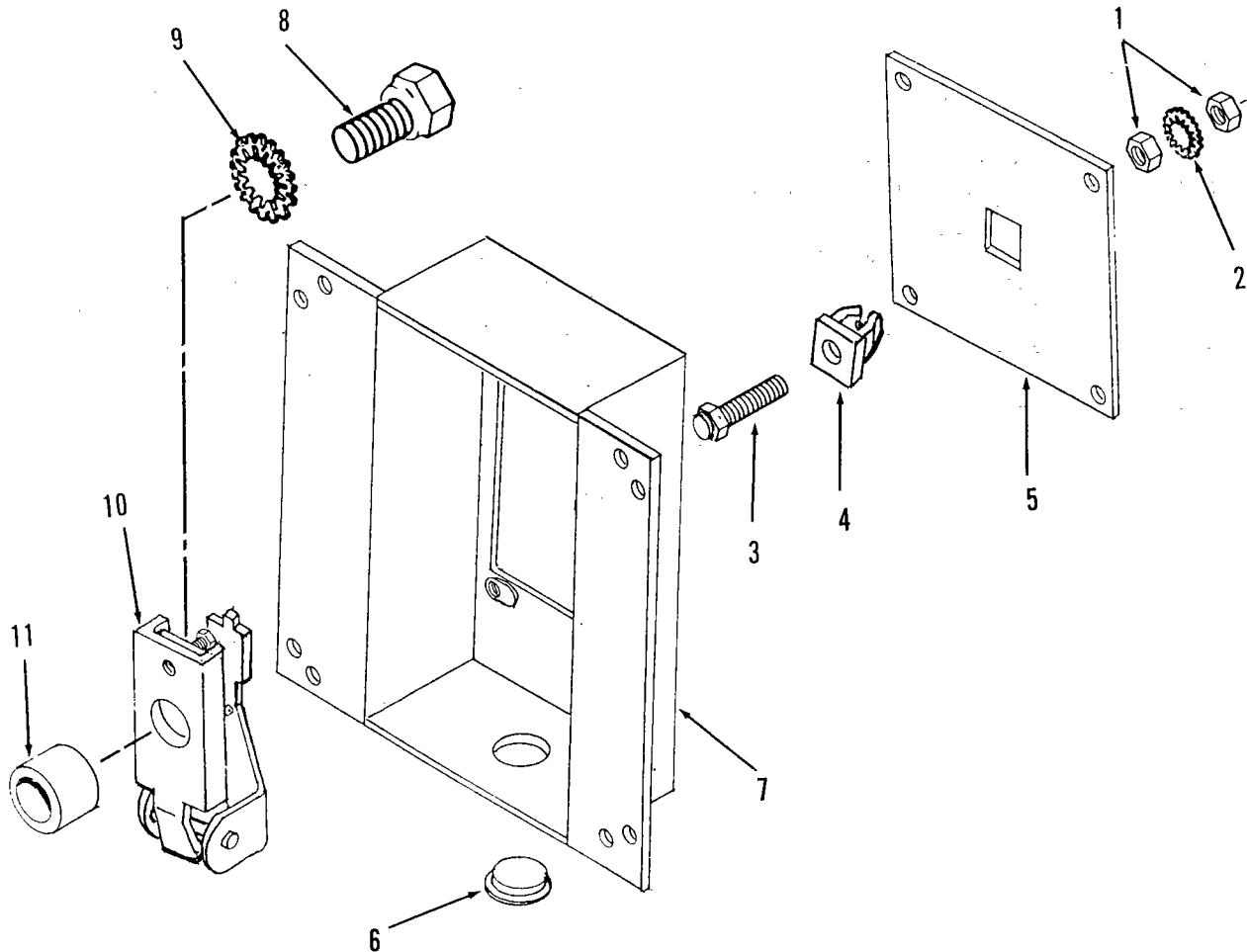


**Generator
Rotor Section
DNCB & DWCB Extended Stack Volt Code L & Z Only**

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	249-0341	2	Screen, Air - Adapter	8	249-0336	1	Rotor, Exciter (Does Not Include Rectifier Assy)
	249-0294	8	Attaching Parts Screw, Cap - Hex Head (M5 x 12mm)	9	249-0271	1	Key
	249-0307	8	Washer, Lock - Spring (M5)	10	249-0340	1	Rectifier Assy, Forward (Includes Item 11 Diodes)
	249-0308	8	Washer, Flat (M5)	11	249-0281	1	Set, Forward Polarity Diode
2	249-0370		Adapter, Generator	12	249-0341	1	Rectifier Assy, Reverse (Includes Item 13 Diodes)
3	249-0290	8	Screw, Cap - Hex Head (M16 x 75mm)	13	249-0282	1	Set, Reverse Polarity Diode
4	249-0402	1	Plate, Pressure	14	249-0283	1	Varister
5	249-0327	3	Disc, Drive				Attaching Parts
6	249-0364	1	Spacer		249-0294	2	Screw, Cap - Hex Head (M5 x 12mm)
7	NFS	1	Rotor, Generator (Includes Exciter, Key, and Rectifier Assemblies)				

NFS - Not For Sale

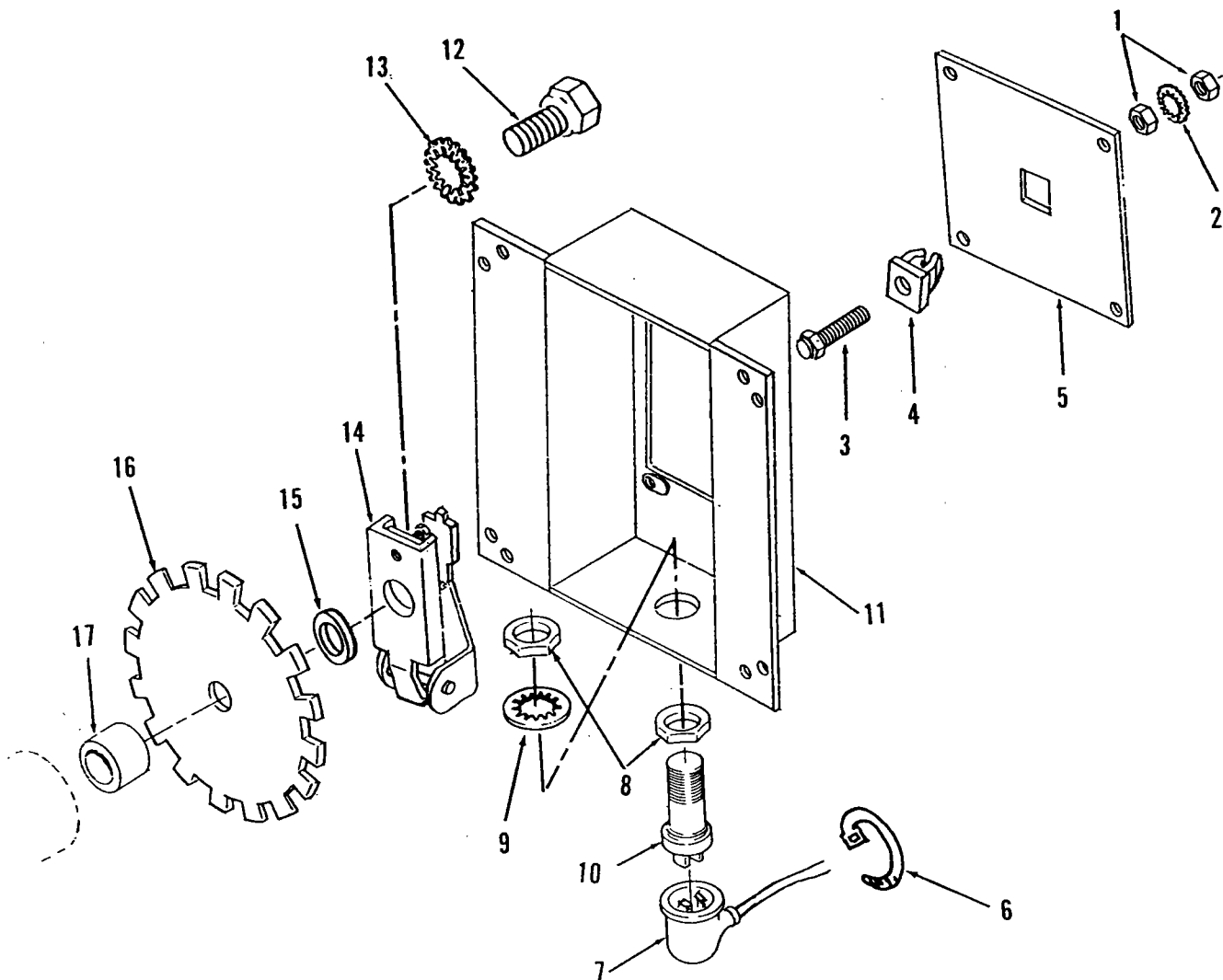
Generator Overspeed Switch



REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	862-0001	2	Nut, Hex (1/4-20)
2	853-0013	1	Washer, Lock - EIT (1/4")
3	150-0723	1	Point, Overspeed
4	870-0250	1	Nut, Insulated
5	150-2206	1	Plate, Mounting
	821-0005	4	Screw, Self-locking - Hex (#10-32 x 1/2")

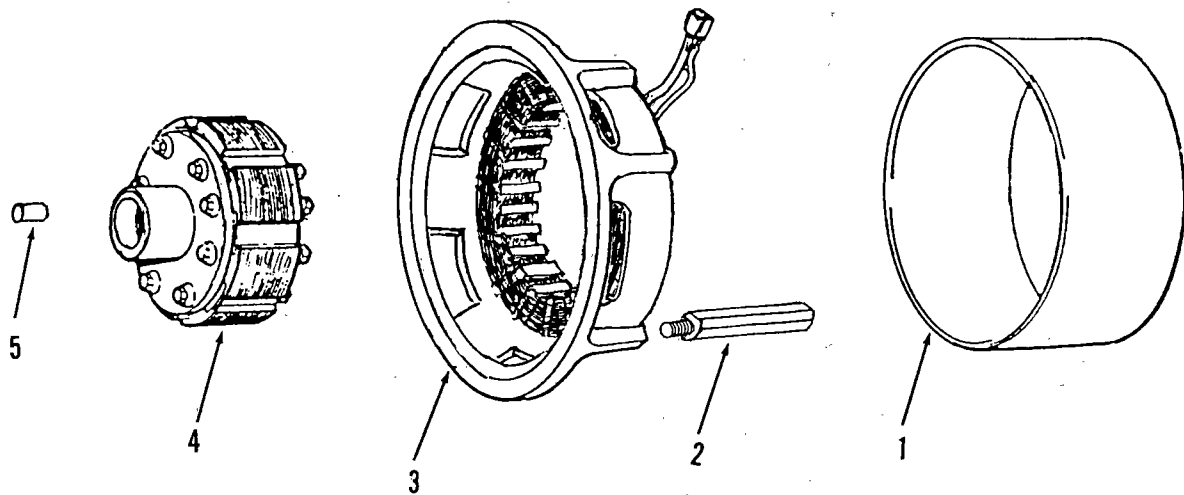
REF NO.	PART NO.	QTY USED	PART DESCRIPTION
6	517-0136	1	Plug, Plastic
7	150-2207	1	Cover, Overspeed Switch
8	718-1058	1	Screw, Cap - Hex Head (M10 x 1.5 x 45mm)
9	856-0010	1	Washer, Lock - EIT (3/8")
10	150-0956	1	Switch, Overspeed
11	370-4032	1	Spacer, Sleeve

Generator Overspeed Sensor



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	862-0001	2	Nut, Hex (1/4-20)	9	854-0031	1	Washer, Lock - IT (3/4")
2	853-0013	1	Washer, Lock - EIT (1/4")	10	150-1406	1	Sensor, Speed
3	150-0723	1	Point, Overspeed	11	150-2207	1	Cover, Overspeed Switch
4	870-0250	1	Nut, Insulated	12	718-1058	1	Screw, Cap - Hex Head (M10 x 1.5 x 45mm)
5	150-2206	1	Plate, Mounting	13	856-0010	1	Washer, Lock - EIT (3/8")
	821-0005	4	Screw, Self-locking - Hex (#10-32 x 1/2")	14	150-0956	1	Switch, Overspeed
6	332-1445	5	Tie, Cable	15	370-4031	1	Spacer, Sleeve
7	338-2189-02	1	Harness, Wiring	16	150-2204	1	Wheel - Speed Sensor
8	868-0011	2	Nut, Jam - Hex (3/4-16)	17	370-4032	1	Spacer, Sleeve

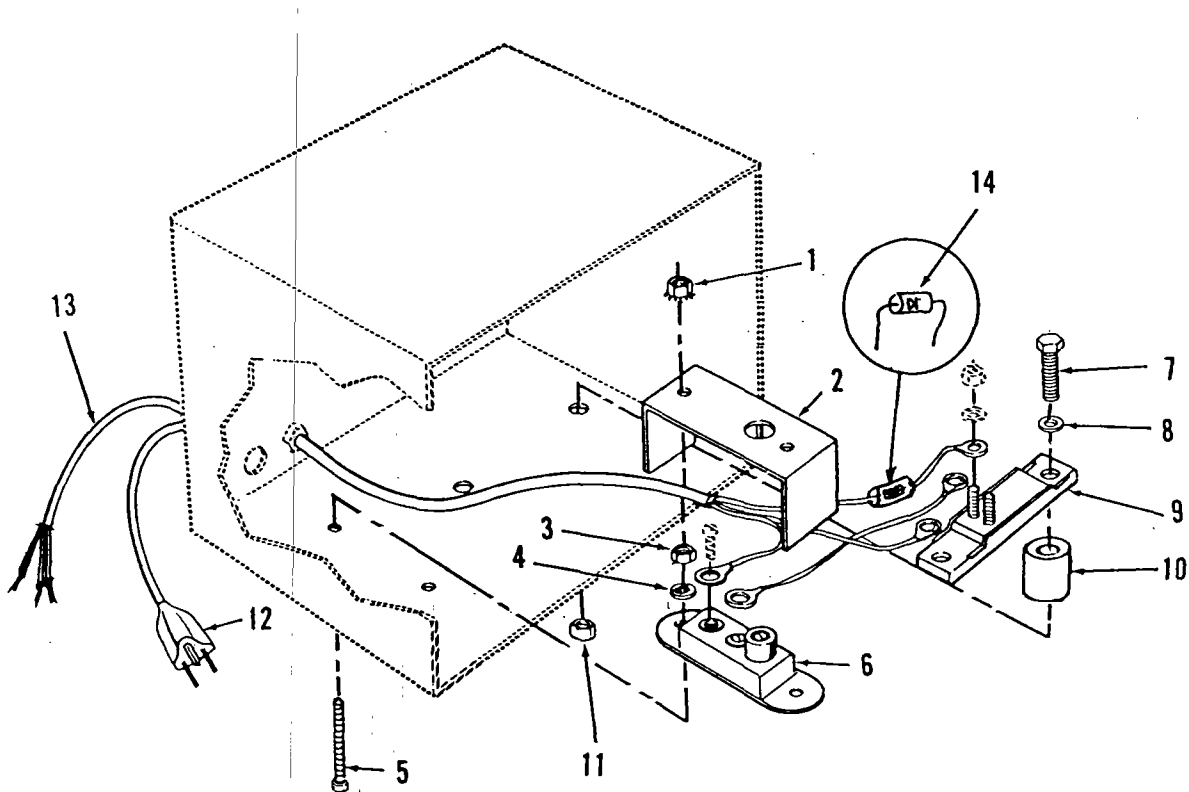
Generator Permanent Magnet Exciter



REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	249-0422	1	Cover
	249-0294	3	Screw, Cap - Hex Head (M5 x 12mm)
	249-0307	3	Washer, Lock (M5)
2	249-0423	3	Pillar, Threaded

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
3	249-0426	1	Stator, Exciter with Frame
4	249-0427	1	Rotor, Exciter
	249-0399	1	Bolt
	249-0202	1	Washer, Lock (M10)
5	249-0313	1	Pin, Dowel

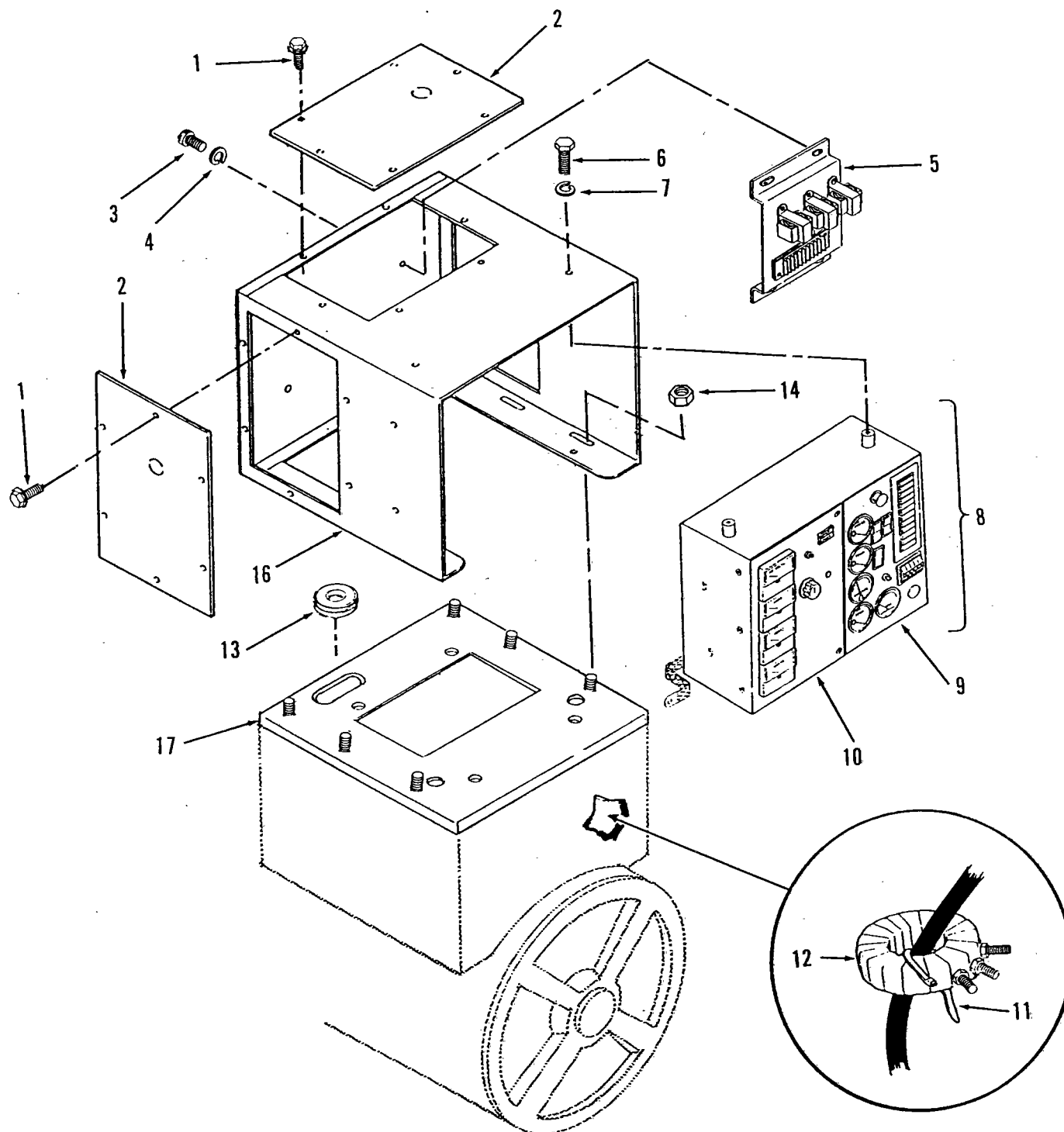
Control Heater



REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	870-0183	2	Nut, Self-locking - Hex (#6-32)
2	301-1886	1	Cover
3	860-0006	1	Nut, Hex (#6-32)
4	854-0006	2	Washer, Lock - IT (#6)
5	812-0070	2	Screw, Machine - Round Head (#6-32 x 1-1/4")
6	309-0128	1	Thermostat, Adjustable
7	800-0034	2	Screw, Cap - Hex Head (5/16-18 x 2-1/4")
8	526-0113	2	Washer, Flat (5/16")

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
9	333-0151	1	Heater, Electrical 120VAC
	333-0378	1	240VAC
10	130-1107	2	Spacer
11	870-0257	2	Nut, Self-locking - Hex (5/16-18)
12	335-0161	1	Cable, Electrical (120VAC Application)
13	338-2121	1	Harness Wiring with Diode, less plug (240VAC Application)
14	357-0013	1	Diode
15	98-3232	1	Decal, Warning - Shock Hazard (Not illustrated)

Generator Set Control

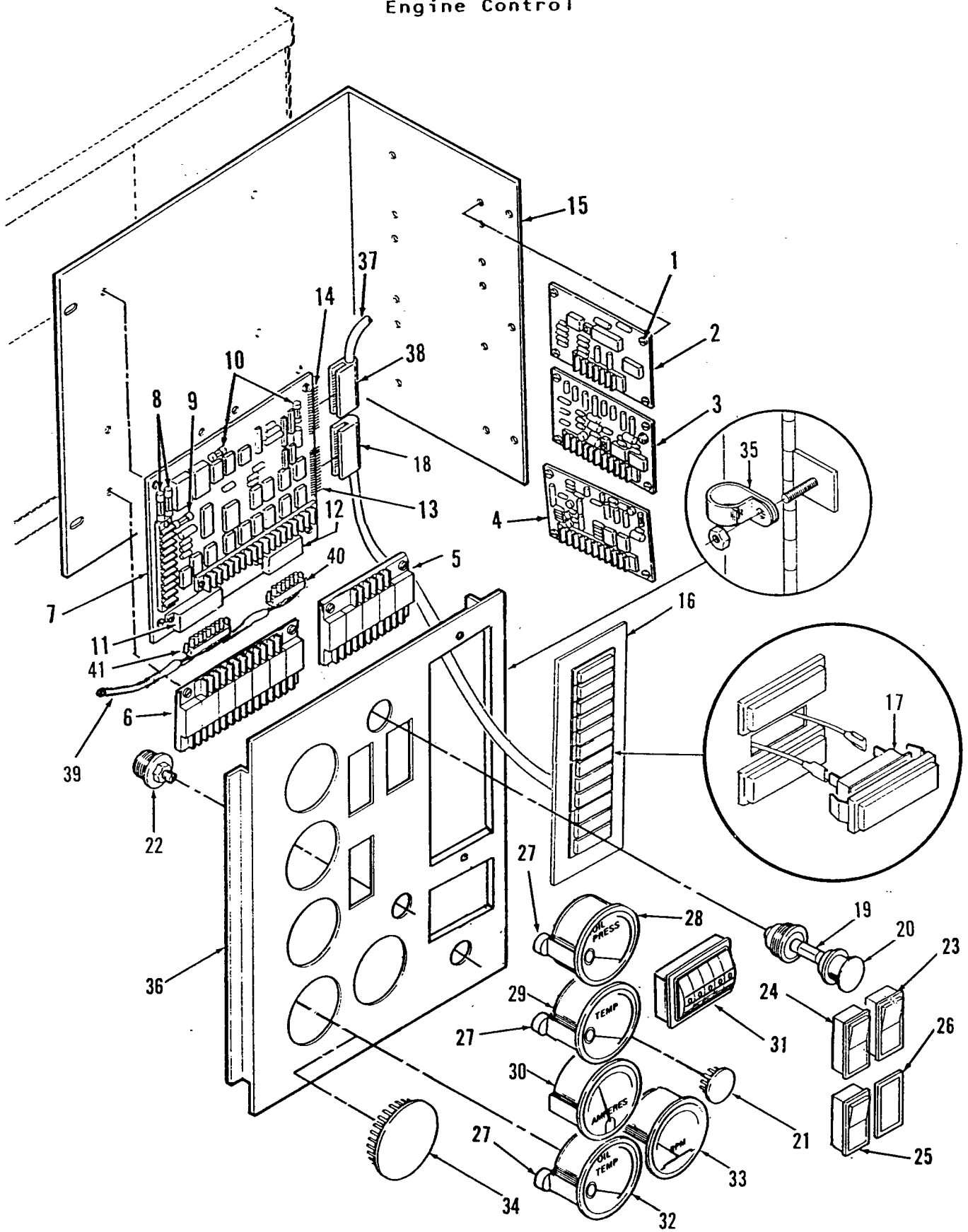


Generator Set Control

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	821-0005	18	Screw, Self-locking - Hex (#10-32 x 1/2")	10	NFS	1	Control, Generator (See Separate Page for Components)
2	NFS	3	Panel, Box - Control	11	332-0941	6	Tie, Cable
3	812-0156	4	Screw, Machine - Round Head (1/4-20 x 1/2")	12	302-1794-01	3	Transformer, Current
4	850-0040	4	Washer, lock - Spring (1/4")				35 & 40 kW Voltage Code L,
5	NFS	1	Transformer Assy, Potential (See Separate Page for Components)		302-1794-02	3	35 & 40 kW Voltage Code Z,
							50 & 60 kW Voltage Code H,
6	800-0051	4	Screw, Cap - Hex Head (5/16-18 x 1/2")				50 & 60 kW Voltage Code L,
7	850-0045	4	Washer, Lock - Spring (5/16")				50 & 60 kW Voltage Code Z,
8	NFS	1	Control, Set (See item 9 & 10 for Components)	13	508-0051	1	35 & 40 kW Voltage Code H.
9	NFS	1	Control, Engine (See Separate Page for Components)	14	870-0212	6	Grommet
				16	NFS	1	Nut, Self-locking - Hex (1/4-20)
				17	NFS	1	Housing, Control
							Adapter, Housing to Terminal Box

NFS - Not For Sale

Engine Control

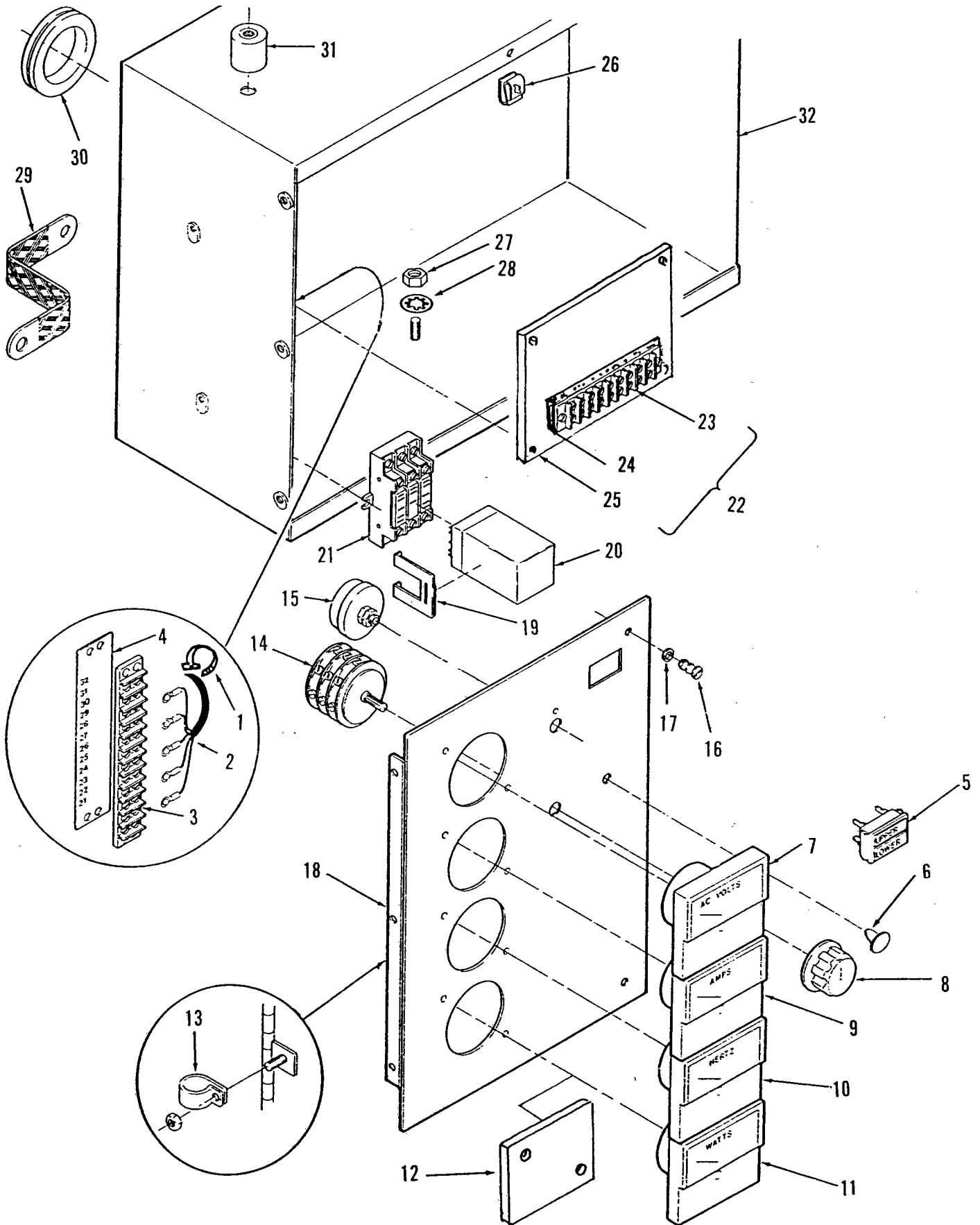


Engine Control

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	815-0544	24	Screw, Machine - Round Head With IT Lock Washer (#6-32 x 1/2")	17	322-0369-02	12	Lamp, Incandescent - 1/3 Watt 28 VDC
2	300-2899	1	Board, Time Delay, Start/Stop - 24 VDC (A15)	18	323-1310	1	Housing, 13 Pin (J3)
3			Board, Magnetic Sensor, Start Disconnect/Over Speed Sensor (A16)	19	322-0017	1	Contact, Pin
	300-2903	1	Standard	20	322-0361	1	Lamp, Incandescent - 28 VDC (DS11)
	300-2904	1	Precision	21	517-0131	1	Holder, Lamp
4	300-2906	1	Board, Over-Under Voltage Sensor - 24 VDC (A17)	22	303-0280	1	Plug, Button
5	300-2856	1	Board, Relay - 24 VDC (A13)	23	308-0785	1	Potentiometer (R11)
6	300-2863	1	Board, Relay - 24 VDC (A14)	24	308-0784	1	Switch, Push (S11)
7			Board, Engine Monitor (A11) (Includes Fuses and Connectors)	26	301-6257	1	Switch, Push (S12)
	300-2808	1	24 VDC, 2 Light	27	193-0250	3	Cover
	300-2812	1	24 VDC, 12 Light	28	193-0352	1	Resistor, Gauge (R12)
8	321-0270	2	Fuse, Cartridge - 20 Amp (F1, F2)	29	193-0351	1	Gauge, Pressure - Oil (M11)
9	321-0231	1	Fuse, Cartridge - 15 Amp (F3)	30	302-1790	1	Gauge, Temperature - Water (M12)
10	321-0094	2	Fuse, Cartridge - 5 Amp (F4, F5)	31	302-0885	1	Ammeter (M13)
11	323-1305	1	Connector, 8 Pin (P1)		815-0385	2	Meter, Totalizing - Time (M14)
12	323-1303	1	Connector, 6 Pin (P2)		870-0183	2	Screw, Machine - Round Head (#6-31 x 1/2")
13	323-1309	1	Connector, 13 Pin (P3)	32	193-0330	1	Nut, Hex with ET Lockwasher (#6-32)
14	323-1307	1	Connector, 12 Pin (P4)	33	302-1715	1	Gauge, Temperature - Oil (M15)
15	NFS	1	Bracket, Mounting [301-8851]	34	517-0221	1	Tachometer (M16)
	821-0004	4	Screw, Self-locking - Hex Hd (#10-32 x 5/16")	35	322-0052	1	Plug, Button
16			Module, Indicator - Fault (Includes replaceable lamps, Harness with connector housing & contact pins) (A12)		870-0131	1	Clamp, Loop
	322-0358-02	1	24 VDC, 2 Light	36	NFS		Nut, Hex with ET Lockwasher (#10-32 x 1/2")
	322-0360-02	1	24 VDC, 12 Light	37	338-1817	1	Door, Control [301-9055-01]
	815-0385	2	Screw, Machine - Round Head (#6-32 x 1/2")	38	323-1308	1	Harness, Wiring - DC Meter (Includes Connector & Pins)
	870-0183	2	Nut, Self-locking - Hex (#6-32)	39	323-1302	12	Housing, 12 Pin (J4)
					323-1302	12	Contact, Pin
					338-2166	1	Harness, Wiring - Control to Engine (Includes Connectors and Pins)
				40	323-1304	1	Housing, 6 Pin
					323-1200	6	Contact, Pin
				41	323-1306	1	Housing, 8 Pin
					323-1200	8	Contact, Pin

NFS - Not For Sale

Generator Control

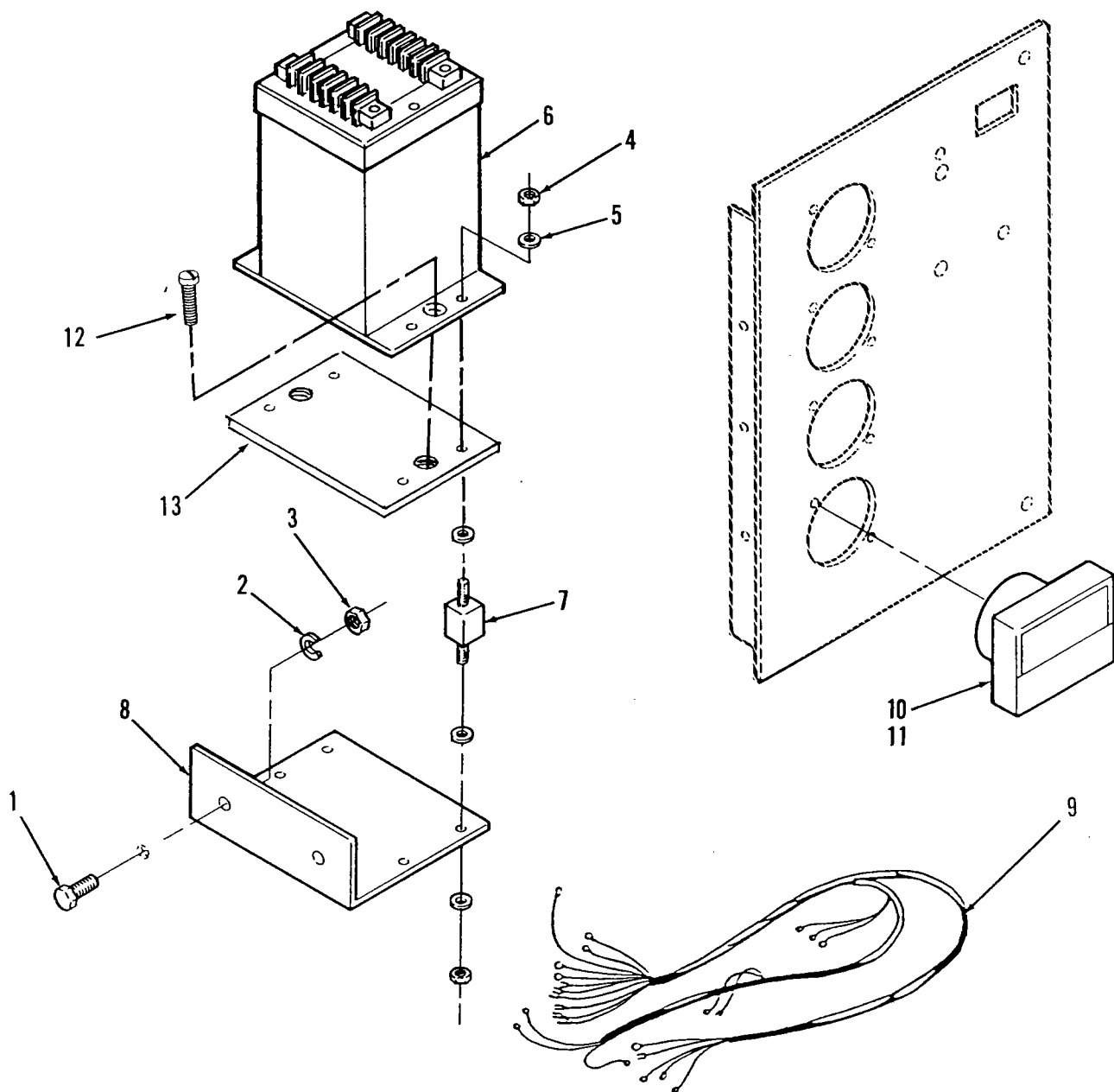


Generator Control

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	332-1445	2	Tie, Cable	14	308-0284	1	Switch, Rotary (S21)
2			Harness, Wiring	15	303-0261	1	Rheostat (R21)
	338-1818	1	Control with Meters (Includes Terminal Block)	16	406-0334	2	Clip, Fastener
	338-1853	1	Control without Meters	17	406-0333	2	Stud, Fastener
	812-0065	2	Screw, Machine - Round Head (#6-32 x 5/8")	18	NFS	1	Door, Control
3	332-0607	1	Block, Terminal (TB1)		821-0004	3	Screw, Self-locking - Hex (#10-32 x 5/16")
4	332-2723	1	Strip, Marker	19	307-1987	2	Clip, Relay
5	322-0363	1	Light, Indicator - Dual (DS21, DS22)	20	307-1056	1	Relay, 24 VDC (K21)
6	517-0131	1	Plug, Button	21	323-0804	1	Socket, Relay
7			Voltmeter (M21)		815-0544	2	Screw, Machine - Round Head with IT Lock Washer (#6-32 x 1/2")
	302-1148	1	Dual Scale 0-300/0-600V	22	NFS	1	Terminal Board Assembly
	302-1753	1	Single Scale 0-750V		812-0065	4	Screw, Machine - Round Head (#6-32 x 5/8")
8	303-0032	1	Knob	23	332-0751	1	Block, Terminal
9			Ammeter (M22)		812-0066	2	Screw, Machine - Round Head (#6-32 x 3/4")
			Single Scale Voltage Code H	24	332-0853	1	Strip, Marker
	302-1298	1	40kW, 0-50 Amp	25	NFS	1	Plate
	302-1757	1	50 & 60kW, 0-75 Amp	26	406-0332	2	Receptacle, Fastener
			Dual Scale Volt. Codes L & Z	27	871-0015	1	Nut, Hex (1/4-20)
	302-1147	1	35 & 40kW, 0-75/0-150 Amp	28	853-0013	1	Washer, Lock - ET (1/4")
	302-1683	1	50kW, 0-100/0-200 Amp	29	337-0049	1	Strap, Electrical (Ground)
	302-1684	1	60kW, 0-150/0-300 Amp		800-0024	1	Screw, Cap - Hex Head (5/16-18 x 1/2")
10	302-1720	1	Meter, Frequency (M23)		856-0008	1	Washer, Lock - EIT (5/16")
11		1	Wattmeter (M24) (See Separate page for Components)	30	508-0051	1	Grommet
12	NFS	1	Cover, Meter Hole	31	402-0527	2	Mount, Vibration
	815-0385	2	Screw, Machine - Round Head, Black (#6-32 x 1/2")		800-0051	4	Screw, Cap - Hex Head (5/16-18 x 1/2")
	870-0183	2	Nut, Hex with ET Lockwasher (#6-32)		850-0045	4	Washer, Lock - Spring (5/16")
13	332-0052	1	Clamp, Loop	32	NFS	1	Box, Control
	870-0131	1	Nut, Self-locking - Hex with ET Lock Washer (#10-32)				

NFS - Not For Sale

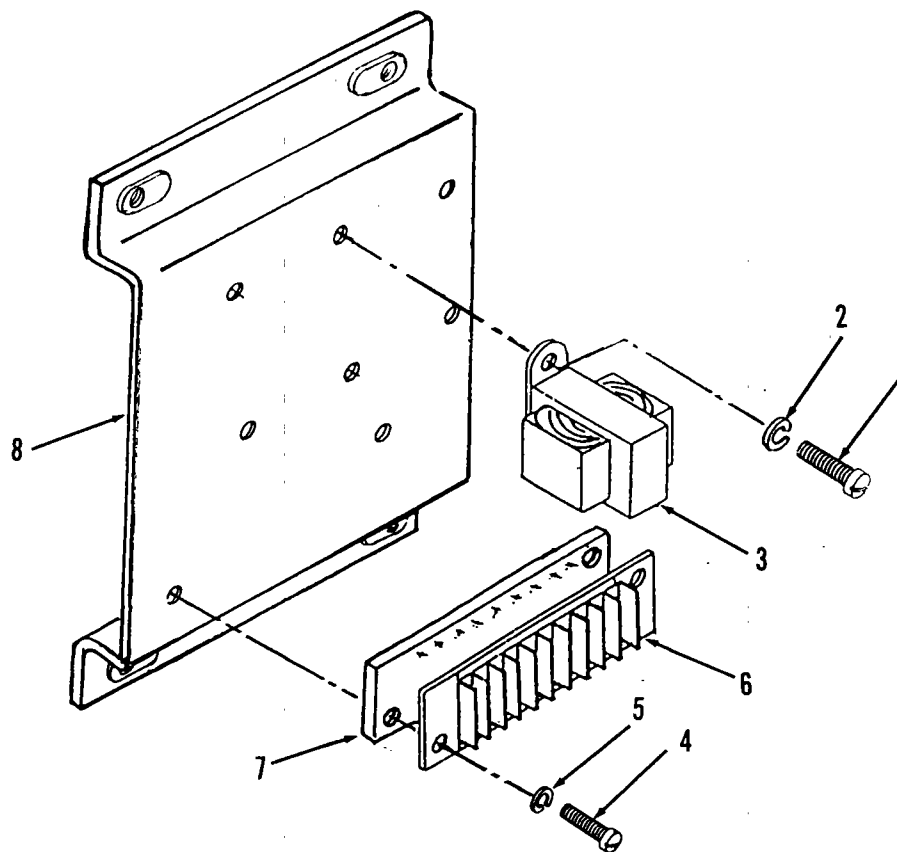
Wattmeter



REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	821-0017	2	Screw, Cap - Hex Head (5/16-18 x 1/2")
2	850-0045	2	Washer, Lock (5/16)
3	862-0014	2	Nut, Hex (5/16-18)
4	860-0008	8	Nut, Hex (#8-32)
5	856-0002	16	Washer, Lock - ET (#8)
6	302-1833-01	1	Transducer, Watt
7	402-0354	4	Mount, Shock

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
8	301-6987	1	Bracket, Mounting
9	338-1936	1	Harness, Wiring
10	302-1722	1	Wattmeter (Less Dial)
11	302-1721-01	1	Dial, Wattmeter
	302-1721-02	1	DNBA, DWBA
	302-1721-02	1	DNCA, DNCB, DWCA, DWCB
12	813-0102	2	Screw, Machine - Round Head (#10-32 x 3/8")
13	319-0030	1	Plate, Support - Transducer

Potential Transformer



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	812-0079	6	Screw, Machine - Round Head (#8-32 x 1/2")	5	850-0025	2	Washer, Lock - Spring (#8)
2	850-0025	6	Washer, Lock - Spring (#8)	6	332-2562	1	Block, Terminal (10 Place)
3	315-0642	3	Transformer, Potential	7	332-2563	1	Strip, Marker
4	812-0077	2	Screw, Machine - Round Head (#8-32 x 3/8")	8	NFS	1	Bracket, Mounting

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Parts Catalog

DNDA / DWDA

DNDB / DWDB

PMG GENERATOR SET



General Information

For part or service, contact the distributor from whom you purchased this equipment or refer to the nearest Authorized Cummins Distributor.

To avoid errors or delays in filling your parts order, always give the full MODEL, SERIAL and ID No. from the nameplate.

For handy reference, insert "YOUR" nameplate information in the spaces below.


		AC Generator Set	
		Model _____	
kw	kva	pf	phase
voltage		amps	
duty		overload	
rpm		hs	
class of insulation		pmg voltage	
field amp max		field voltage max	
generator model no.			
voltage regulator model no.			
ID no.			
generator set serial no.			
BS5000		NEMA	

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Introduction

This Parts Manual applies to the Standard Gen Sets Listed below. The illustrations are arranged in groups of related items, and each part or assembly is identified by a Reference Number. All parts illustrated are typical, and unless otherwise mentioned in the description column the parts are interchangeable between models.

These typical illustrations are subject to change and reflect only the latest replacement parts arrangement. The Right and Left sides of the Set are determined by FACING the FRONT (Engine end) of the Set.

Set Data Table

MODEL IDENTIFICATION	RATING	RPM RATING	BATTERY VOLTAGE
60.0 DNDA/DWDA - */ # @	60,000 WATTS	1500 RPM	24 VDC
80.0 DNDA/DWDA - */ # @	80,000 WATTS	1800 RPM	24 VDC
85.0 DNDB/DWDB - */ # @	85,000 WATTS	1500 RPM	24 VDC
100.0 DNDB/DWDB - */ # @	100,000 WATTS	1800 RPM	24 VDC

Electrical Data Table

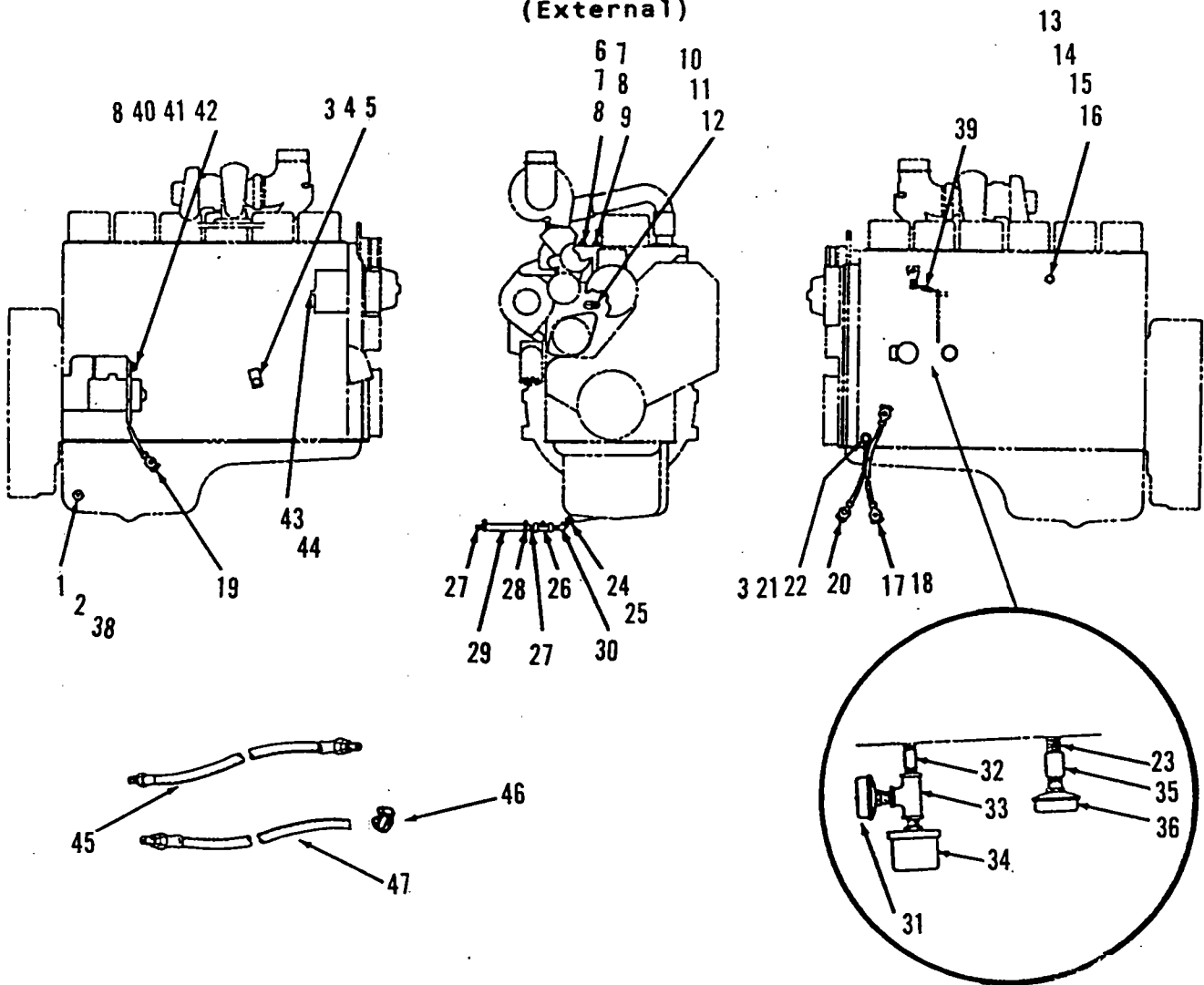
*VOLTAGE CODE	VOLTS	HERTZ	WIRE	PHASE	NOTES
H	347/600	60	4	3	
L	120/208	60	12	3	+
	127/220	60	12	3	
	139/240	60	12	3	
	240/416	60	12	3	
	254/440	60	12	3	
	277/480	60	12	3	
Z	110/190	50	12	3	+
	115/200	50	12	3	
	120/208	50	12	3	
	127/220	50	12	3	
	220/380	50	12	3	
	230/400	50	12	3	
	240/416	50	12	3	
	254/440	50	12	3	

- * - Voltage Codes follow Model Letter designations.
- # - Specification Number: Number 1 is Standard, all others indicate variations.
- @ - Specification Letter: Letter advances (A to B, B to C, etc) with major manufacturing changes.
- + - The Stators are Reconnectible.

Engine Replacement Parts

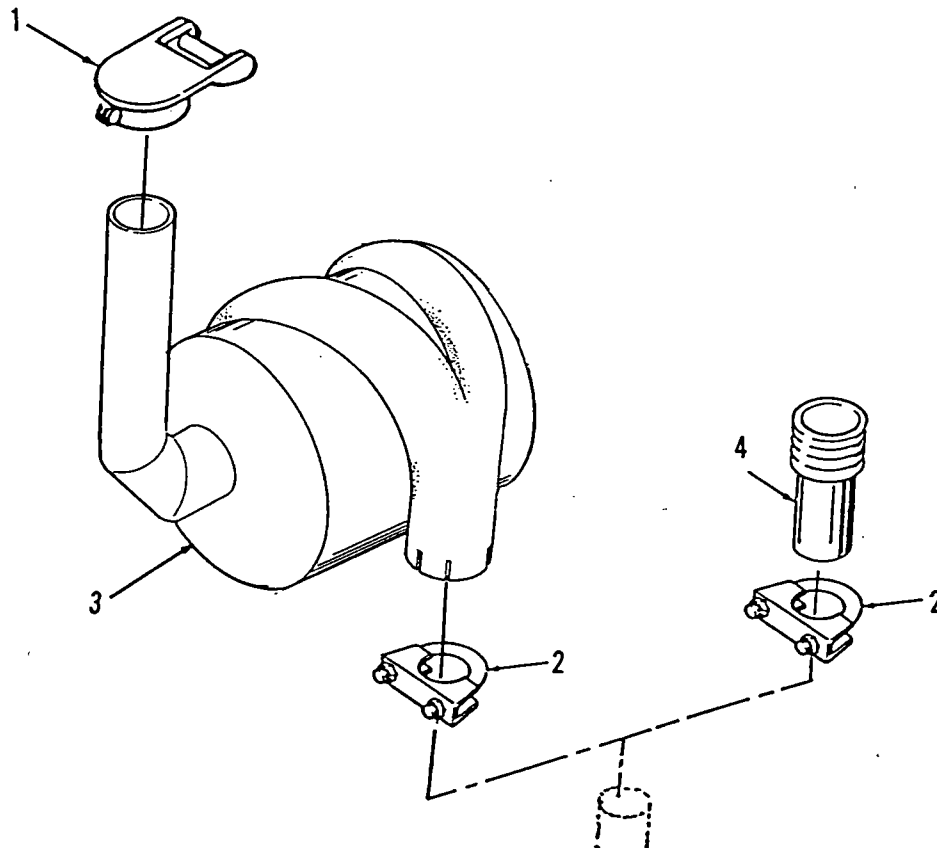
The Engine replacement parts can be ordered from the Cummins Engine Distributor except those parts modified or added during the Gen Set Assembly. When ordering engine parts, refer to the Engine Data plate and supply the Model, Serial, and CPL numbers. For assistance in ordering the Engine replacement parts, contact the nearest Cummins Engine Distributor or the Supplier from whom you purchased the Generator Set.

Engine Components (External)



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	193-0353	1	Sender, Temperature - Oil	22	850-2012	1	Washer, Lock (M12)
2	187-0146	1	Washer, Sealing	23	505-0098	1	Nipple, Close
3	856-0013	3	Washer, Lock - EIT (1/2")	24	102-1147	1	Gasket, Drain - Oil Pan
4	332-2739	1	Bracket Assembly, Terminal	25	102-1237	1	Adapter, Drain - Oil
5	800-2112	1	Screw, Cap - Hex Head (M12-1.75 x 30mm)	26	504-0011	1	Valve, Shutoff
6	309-0554	1	Switch, Temperature	27	505-0185	2	Nipple, Half
7	812-0075	1	Screw, Machine - Round Head (#8-32 x 1/4")	28	503-0197	2	Clamp, Hose
8	850-0025	2	Washer, Lock (#8)	29	503-0098	1	Hose, Drain (6")
9	309-0553	1	Switch, Temperature	30	505-0248	1	Elbow, Pipe - Street
10	800-2060	1	Screw, Cap - Hex Head (M8-1.25 x 35mm)	31	309-0169	1	Switch, Pressure - Oil
11	850-2008	1	Washer, Lock (M8)	32	505-0104	1	Nipple, Pipe - Short
12	309-0269	1	Switch, Temperature	33	505-0059	1	Tee, Pipe - Black
13	193-0375	1	Sender, Temperature	34	193-0244	1	Sender, Pressure - Oil
14	526-0008	2	Washer, Flat (#10)	35	505-0026	1	Coupling, Pipe
15	850-0030	1	Washer, Lock (#10)	36	309-0272	1	Switch, Pressure - Oil
16	871-0010	1	Nut, Cap - Hex Head (#10-32)	38	505-1373	1	Bushing, Reducer
17	416-0446	1	Cable, Battery (9")	39	145-0596	1	Spring, Extension - Throttle
18	332-0941	2	Tie, Cable	40	871-0028	1	Nut, Hex (3/8-16)
19	416-0444	1	Cable, Battery (44")	41	850-0050	1	Washer, Lock - Spring (3/8")
20	416-0893	1	Cable, Battery (10")	42	860-0008	1	Nut, Hex (#8-32)
21	800-2110	1	Screw, Cap - Hex Head (M12-1.75 x 20mm)	43	115-0025	1	Nut, Hex (1/4-28)
				44	850-0040	1	Washer, Lock - Spring (1/4")
				45	501-0441	1	Line, Fuel - Flex (Fuel In)
				46	503-0685	1	Clamp, Hose
				47	501-0502	1	Line, Fuel - Flex (Fuel Out)

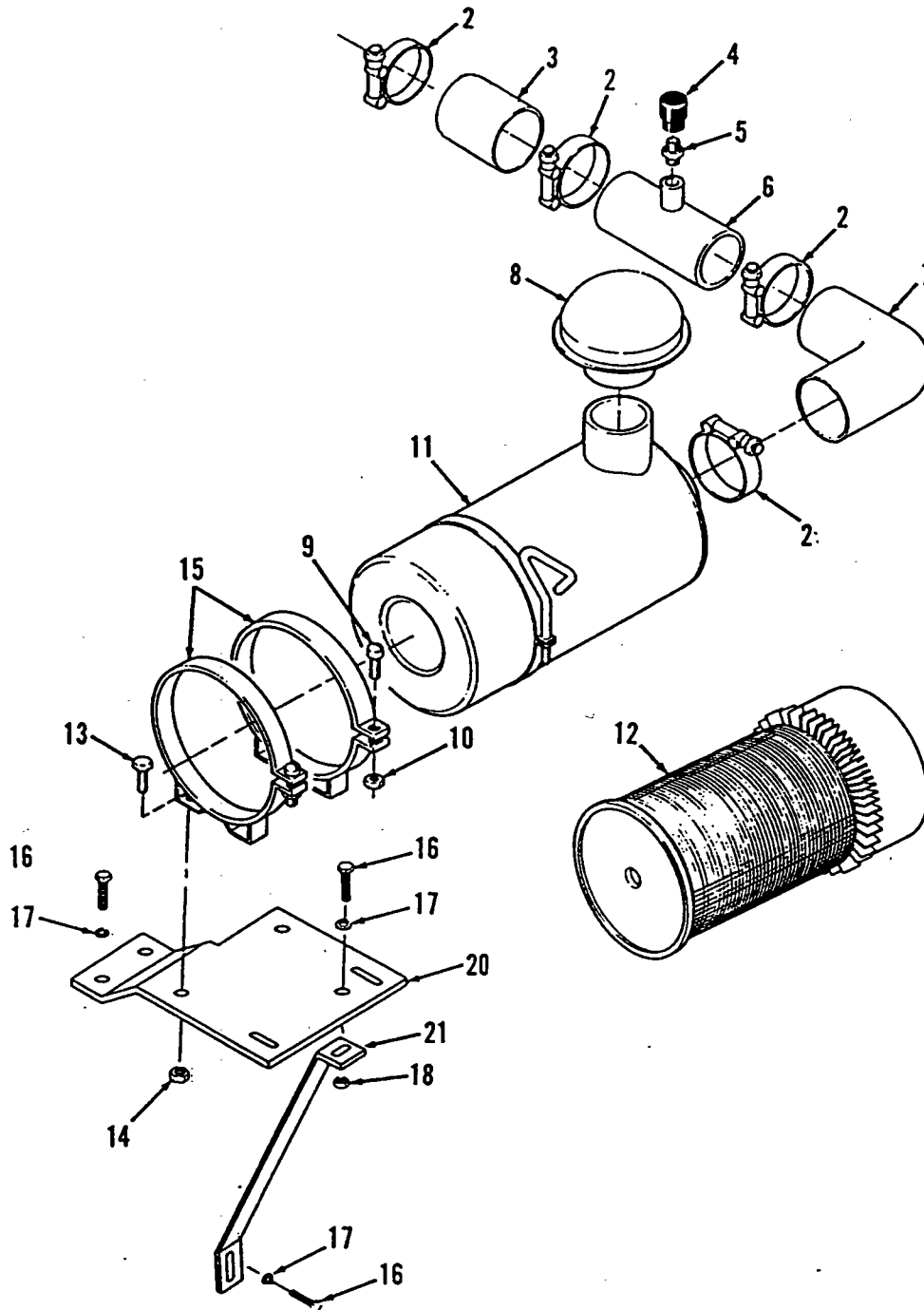
Exhaust System



REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	155-2062-03	1	Cap, Rain
2	155-2175	1	Clamp, Muffler

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
3	155-2263	1	Silencer
4	154-2253	1	Adapter, Exhaust

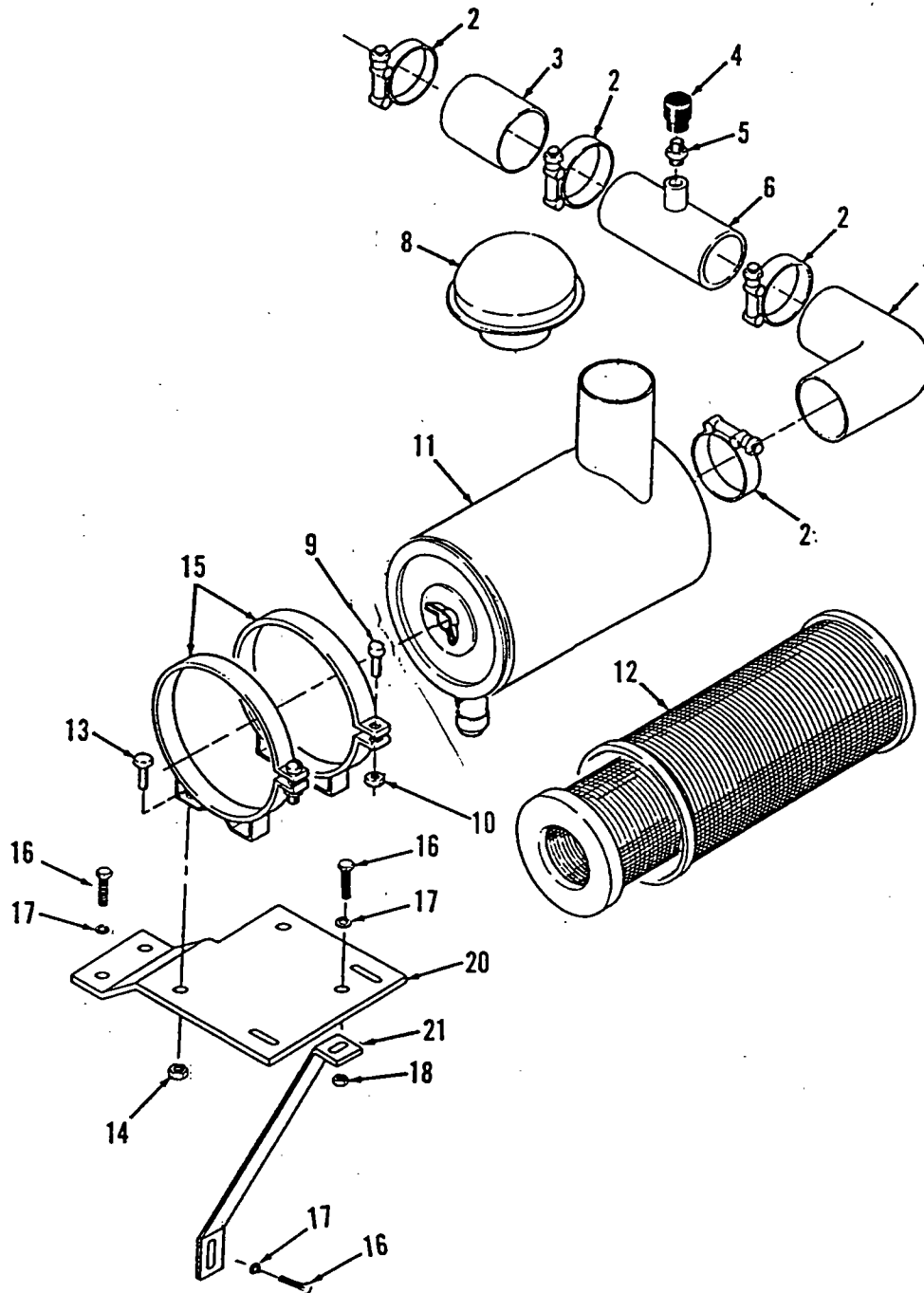
Air Cleaner - Standard



REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	503-0998	2	Clamp, Hose
2	503-0868	1	Clamp, Hose
3	503-1543	1	Hose, Reducing
4	140-1548	1	Indicator, Service
5	140-1260	1	Adapter, Indicator
6	140-2166	1	Tube, Inlet - Air
7	503-1542	1	Elbow, Hose - Reducing
8	140-2157	1	Cap, Air Cleaner
9	815-0115	2	Screw, Machine - Fillister Head (1/4-20 x 1")
10	863-0002	2	Nut, Square (1/4-20)
11	140-2147	1	Cleaner, Air (Includes Element)

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
12	140-2148	1	Element, Air Cleaner
13	821-0033	3	Screw, Self-locking - Hex Head (7/16-14 x 3/4")
14	870-0437	3	Nut, Lock (7/16-14)
15	140-0078	2	Band, Mounting
16	800-2110	4	Screw, Cap - Hex Head (M12 x .8 x 20mm)
17	850-2012	4	Washer, Lock - Spring (M12)
18	750-1010	1	Nut, Hex (M12)
19	503-0999	1	Clamp, Hose
20	140-2153	1	Bracket, Mounting
21	140-2154	1	Brace, Mounting

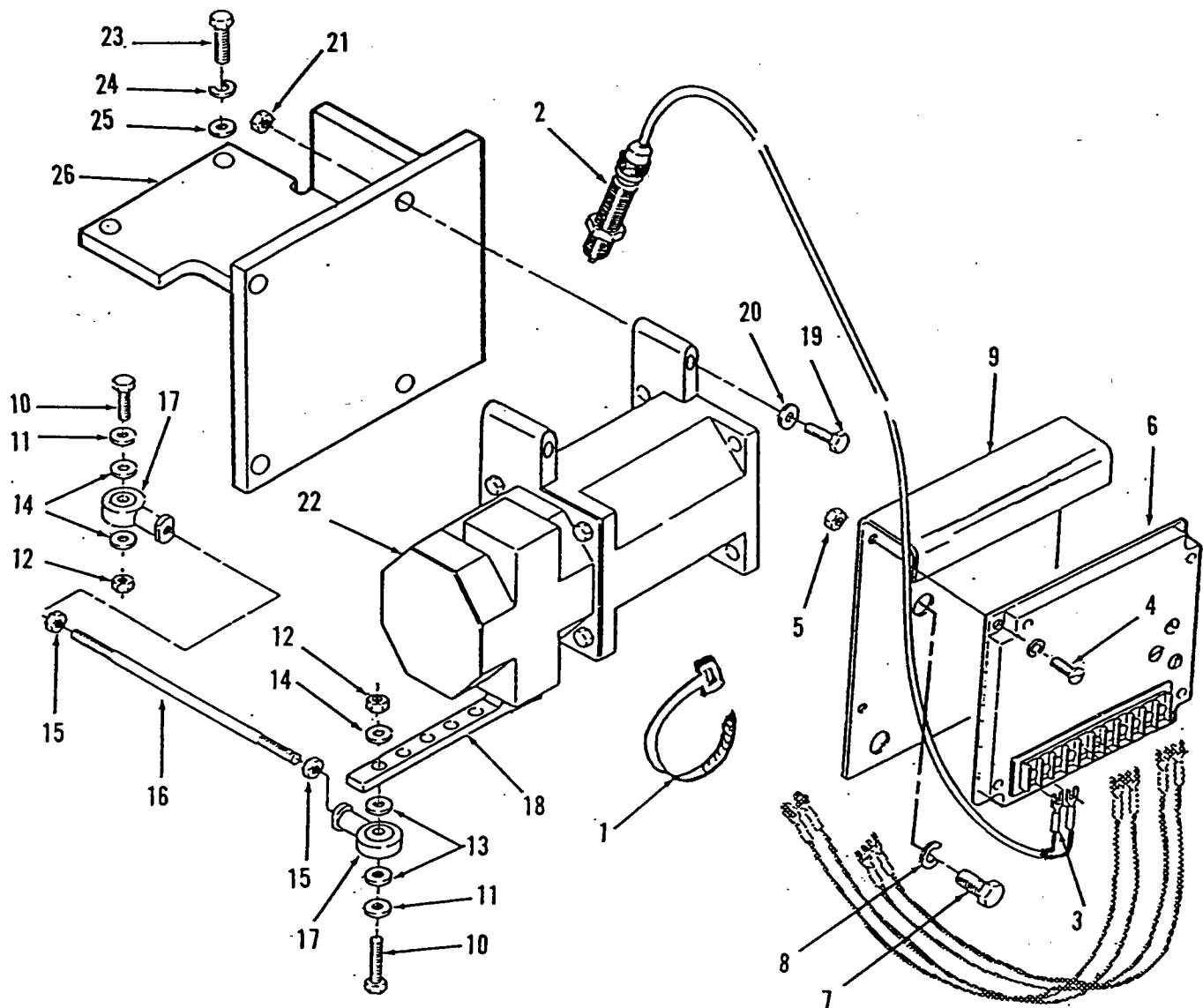
Air Cleaner - Heavy Duty



REF NO.	PART NO.	QTY USED	PART DESCRIPTION
2	503-0868	4	Clamp, Hose
3	503-1460	1	Hose
4	140-1548	1	Indicator, Service
5	140-1260	1	Adapter, Indicator
6	140-2152	1	Tube, Inlet - Air
7	503-1467	1	Elbow
8	140-1435	1	Cap, Air Cleaner
9	815-0115	2	Screw, Machine - Fillister Head (1/4-20 x 1")
10	863-0002	2	Nut, Square, (1/4-20)
11	140-2149	1	Cleaner, Air (Includes Element)

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
12			Element, Air Cleaner
	140-2148	1	Primary
	140-2150	1	Secondary
13	821-0033	4	Screw, Self-locking - Hex Head (7/16-14 x 3/4")
14	870-0437	4	Nut, Lock (7/16-14)
15	140-1599	2	Band, Mounting
16	800-2110	4	Screw, Cap - Hex Head (M12 x .8 x 20mm)
17	850-2012	4	Washer, Lock - Spring (M12)
18	750-1010	1	Nut, Hex (M12)
20	140-2153	1	Bracket, Mounting
21	140-2154	1	Brace, Mounting

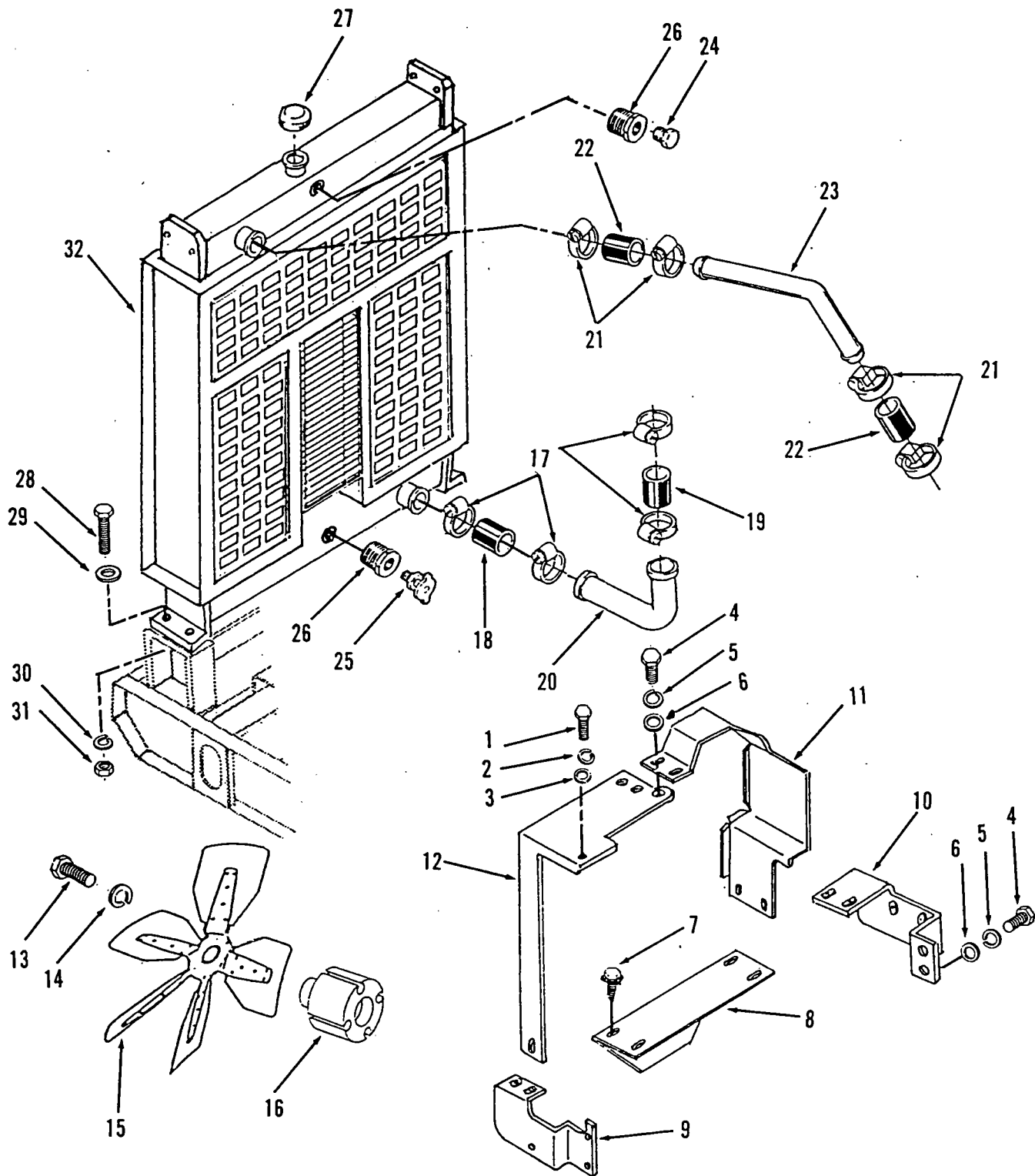
Electronic Governor



REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	332-1445	5	Tie, Cable
2	150-2201	1	Sensor, Speed - Includes Leads, Less Terminals
3			Terminal, Electrical (For all Electrical Leads)
	332-1279	8	Spade, #6
	332-0325	1	Ring, #10
	332-1087	1	Ring, 1/2"
4	813-0103	4	Screw, Machine - Round Head (#10-32 x 3/4")
5	870-0131	4	Nut, Hex - W/ET (#10-32) (Not used all installations)
6	151-0611	1	Control, Governor
7	800-2110	2	Screw, Cap - Hex Head (M12 x 1.75 x 20mm)
8	850-2012	2	Washer, Flat (M12)
9	150-2007	1	Bracket, Mounting
10	815-0172	2	Screw, Machine - Hex Head (#10-32 x 1")

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
11	526-0327	2	Washer, Flat (13/64)
12	870-0131	2	Nut, Hex - W/ET (#10-32)
13	526-0008	2	Washer, Flat (#10)
14	526-0196	3	Washer, Flat - Aluminum
15	870-0053	2	Nut, Hex (#10-32)
16	150-2218-02	1	Rod - Governor
17	150-2200	2	Joint, Ball
18	150-2203	1	Lever, Actuator - Governor
19	800-0012	4	Screw, Cap - Hex Head (1/4-20 x 2 1/4")
20	526-0018	4	Washer, Flat (1/4)
21	870-0212	4	Nut, Self-locking - Hex (1/4-20)
22	151-0632	1	Actuator, Governor (24VDC)
23	800-2060	3	Screw, Cap - Hex Head (M8 x 1.25 x 35mm)
24	850-2008	3	Washer, Lock (M8)
25	526-0115	3	Washer, Flat (M8)
26	150-2187	1	Bracket, Governor

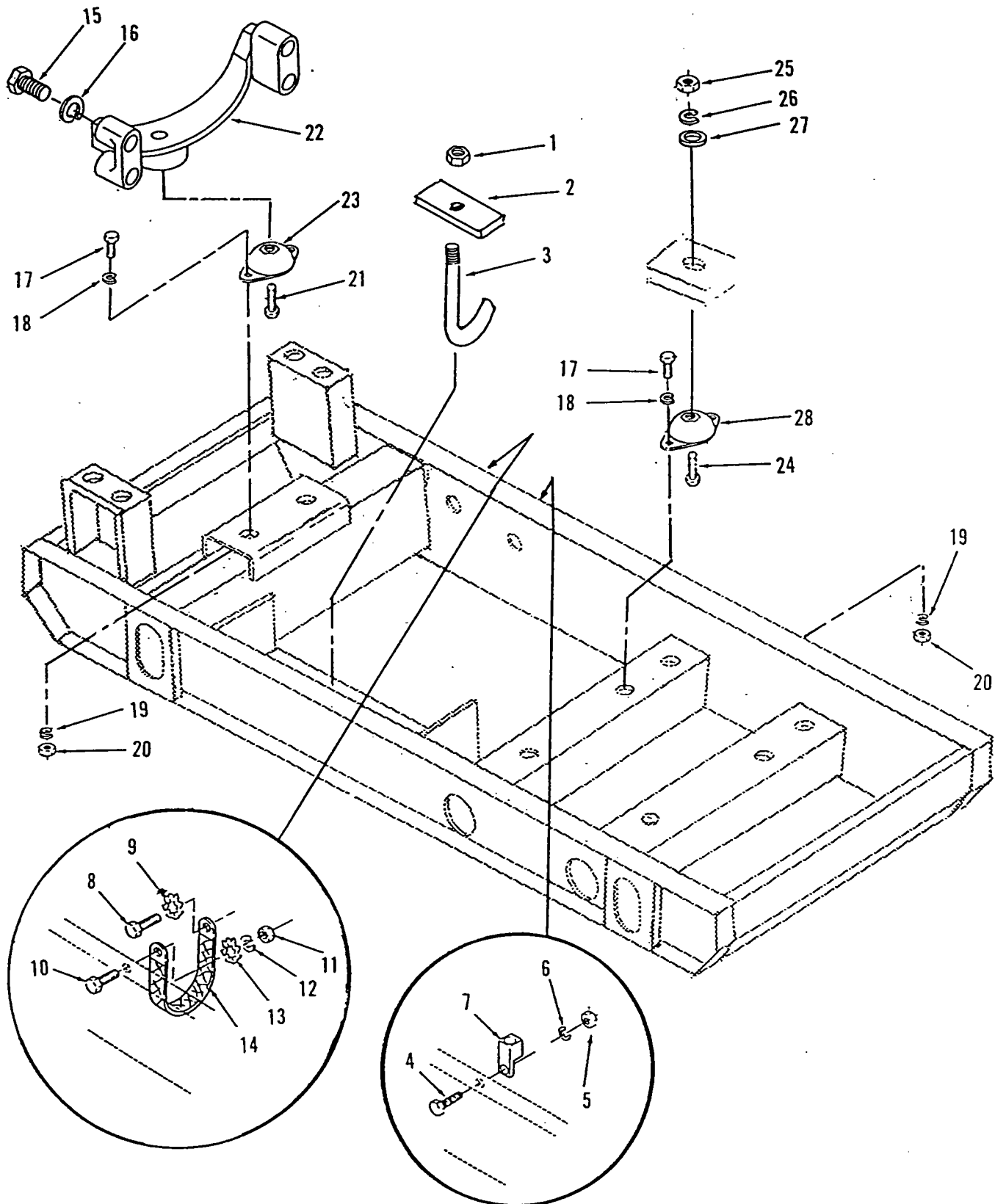
Cooling System (Radiator)



Cooling System (Radiator)

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	800-2084	1	Screw, Cap - Hex Head (M10 x 1.5 x 16mm)	15	130-3117	1	Fan, Radiator
2	526-2120	1	Washer, Flat (M10)	16	130-3114	1	Spacer, Fan
3	850-2010	1	Washer, Lock - Spring (M10)	17	503-0354	4	Clamp, Hose
4	800-2110	5	Screw, Cap - Hex Head (M12 x 1.75 x 20mm)	18	503-1379-02	1	Hose, Radiator
5	526-2140	5	Washer, Flat (M12)	19	503-1379-03	1	Hose, Radiator
6	850-2012	5	Washer, Lock - Spring (M12)	20	130-3147	1	Tube, Outlet - Radiator
7	821-0009	9	Screw, Self-locking - Hex (1/4-20 x 3/8")	21	503-0365	4	Clamp, Hose
8	130-3121	1	Plate, Bottom	22	503-1391-01	2	Hose, Radiator
9	130-3124	1	Guard, Belt (Right Side)	23	130-3149	1	Tube, Inlet - Radiator
10	130-3125	1	Guard, Belt (Left Side)	24	502-0153	1	Plug, Hex Head (1/4 NPT)
11	130-3127	1	Guard, Belt - Alternator	25	504-0003	1	Cock, Drain
12	130-3126	1	Guard, Belt - Alternator	26	502-1033	2	Adapter, Metric To NPT
13	718-1044	4	Screw, Cap - Hex Head (M8 x 1.25 x 60mm)	27		1	Cap, Radiator
14	850-2008	4	Washer, Lock - Spring (M8)	28	800-0028	4	Screw, Cap - Hex Head (5/16-18 x 1")
				29	526-0022	4	Washer, Flat (5/16)
				30	850-0045	4	Washer, Lock - Spring (5/16)
				31	862-0015	4	Nut, Hex (5/16-18)
				32	130-3278	1	Radiator

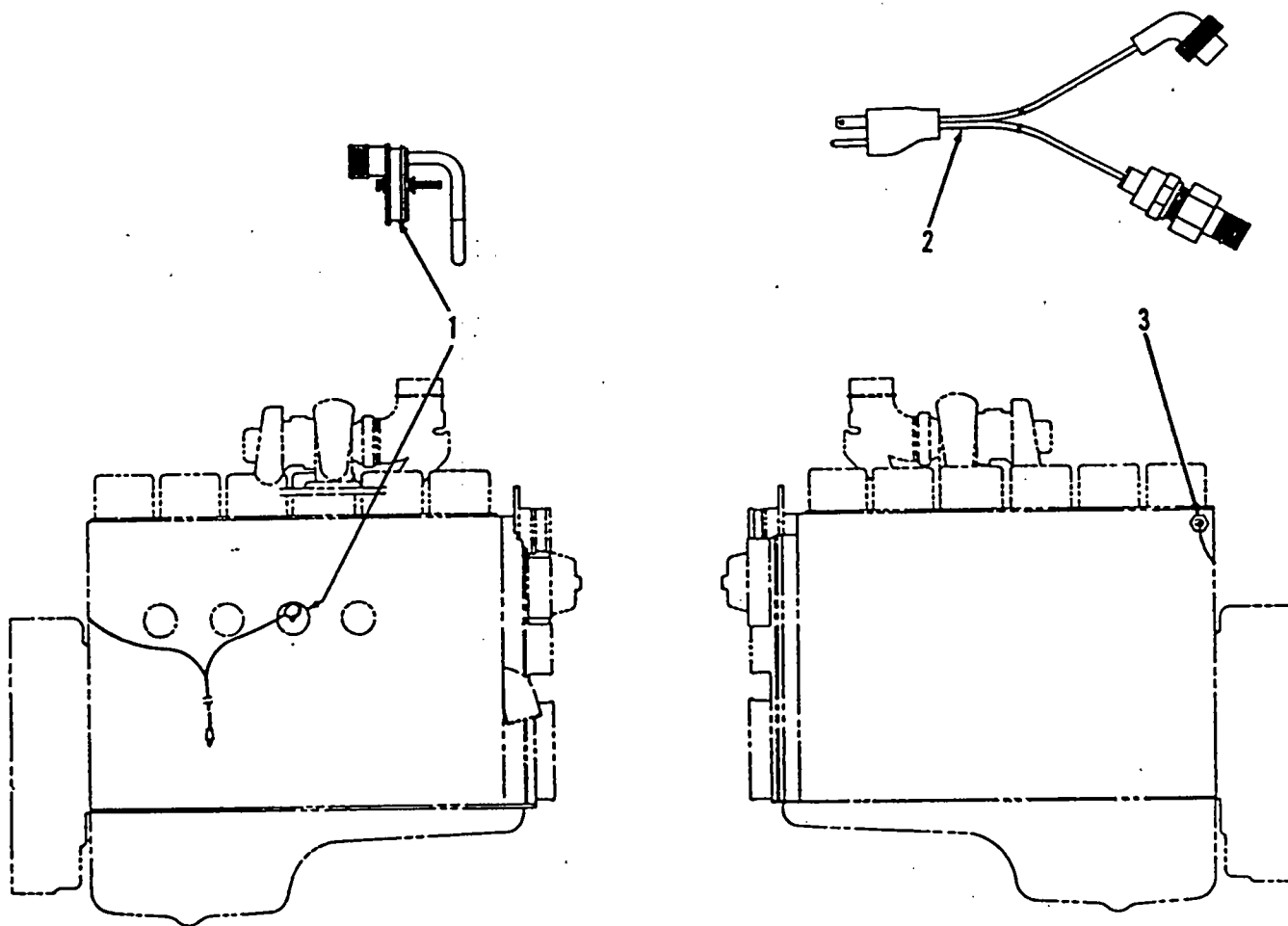
Chassis



Chassis

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	870-0212	1	Nut, Lock (1/4-20)	15	800-2120	4	Screw, Cap - Hex Head (M12 x 1.75 x 70mm)
2	416-0854	1	Bracket, Mounting - Battery	16	850-2012	5	Washer, Lock (M12)
3	416-0853	1	Holddown, Battery	17	800-0092	10	Screw, Cap - Hex Head (1/2-13 x 1-1/2")
4	800-0026	1	Screw, Cap - Hex Head (5/16-18 x 3/4")	18	850-0060	10	Washer, Lock - Spring (1/2")
5	856-0008	1	Washer, Lock - EIT (5/16)	19	526-0219	10	Washer, Flat (1/2")
6	870-0257	1	Nut, Lock (5/16-18)	20	862-0016	10	Nut, Hex (1/2-13)
7	332-1473	1	Lug, Solderless	21	800-0520	3	Screw, Cap - Hex Head (3/4-10 x 1")
8	800-2111	1	Screw, Cap - Hex Head (M12 x 1.75 x 25mm)	22	403-2567	1	Support, Engine
9	856-0013	1	Washer, Lock - EIT (1/2")	23	402-0568	1	Mount, Vibration
10	800-0092	1	Screw, Cap - Hex Head (1/2-13 x 1-1/2")	24	800-0156	4	Screw, Cap - Hex Head (3/4-10 x 2-1/4")
11	862-0016	1	Nut, Hex (1/2-13)	25	862-0008	4	Nut, Hex (3/4-10)
12	850-0060	1	Washer, Lock - Spring (1/2")	26	850-0079	2	Washer, Lock - Spring (3/4")
13	856-0013	1	Washer Lock - EIT (1/2")	27	526-0238	2	Washer, Flat (3/4)
14	337-0090	1	Strap, Electrical	28	402-0466	2	Mount, Vibration

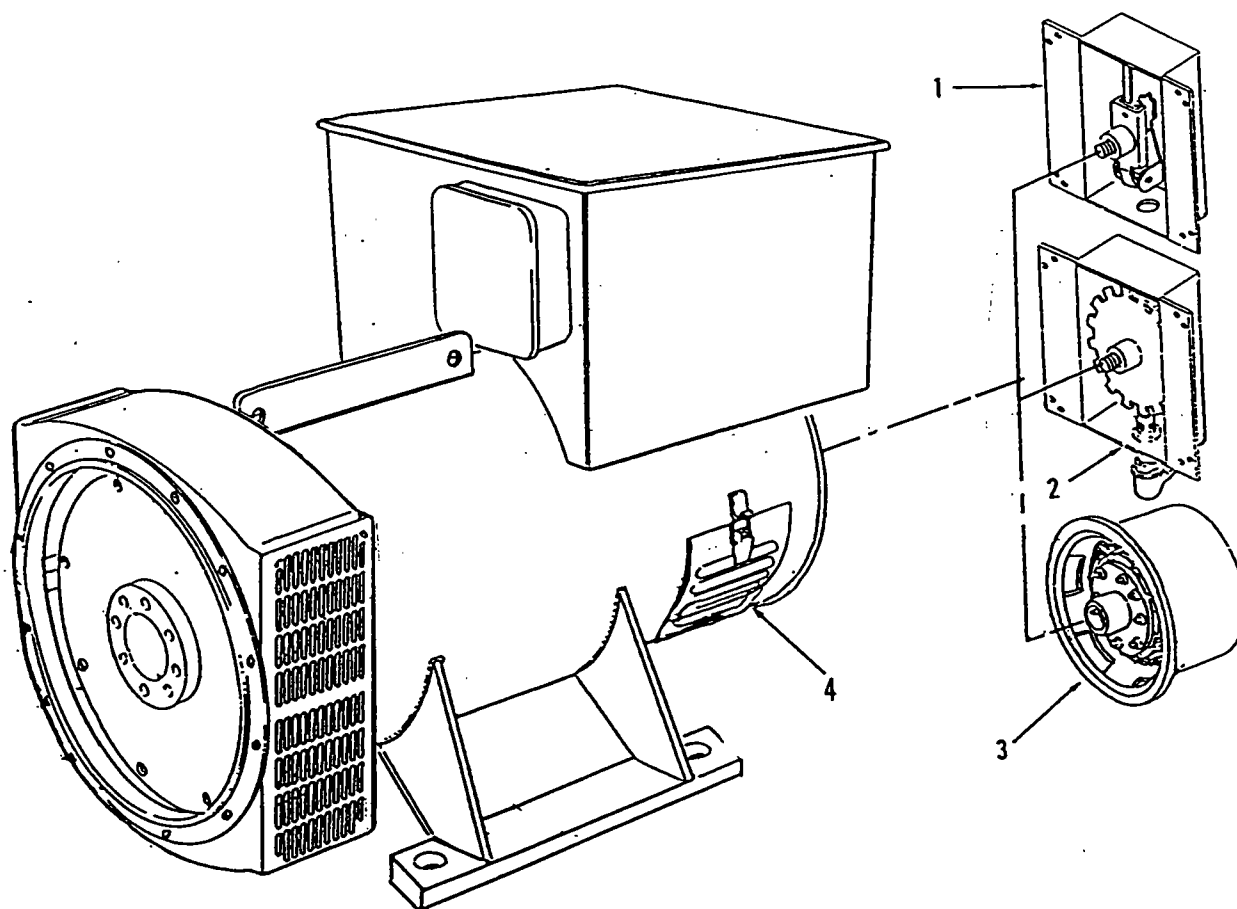
Engine Coolant Heater



REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1			Heater, Engine Coolant
	333-0291-01	1	120 VAC
	333-0291-02	1	240 VAC

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
2			Cable, Electrical (Includes Thermostat Switch)
	333-0292-01	1	120 VAC
	333-0292-02	1	240 VAC
3	505-0851	1	Bushing, Reducer

Generator

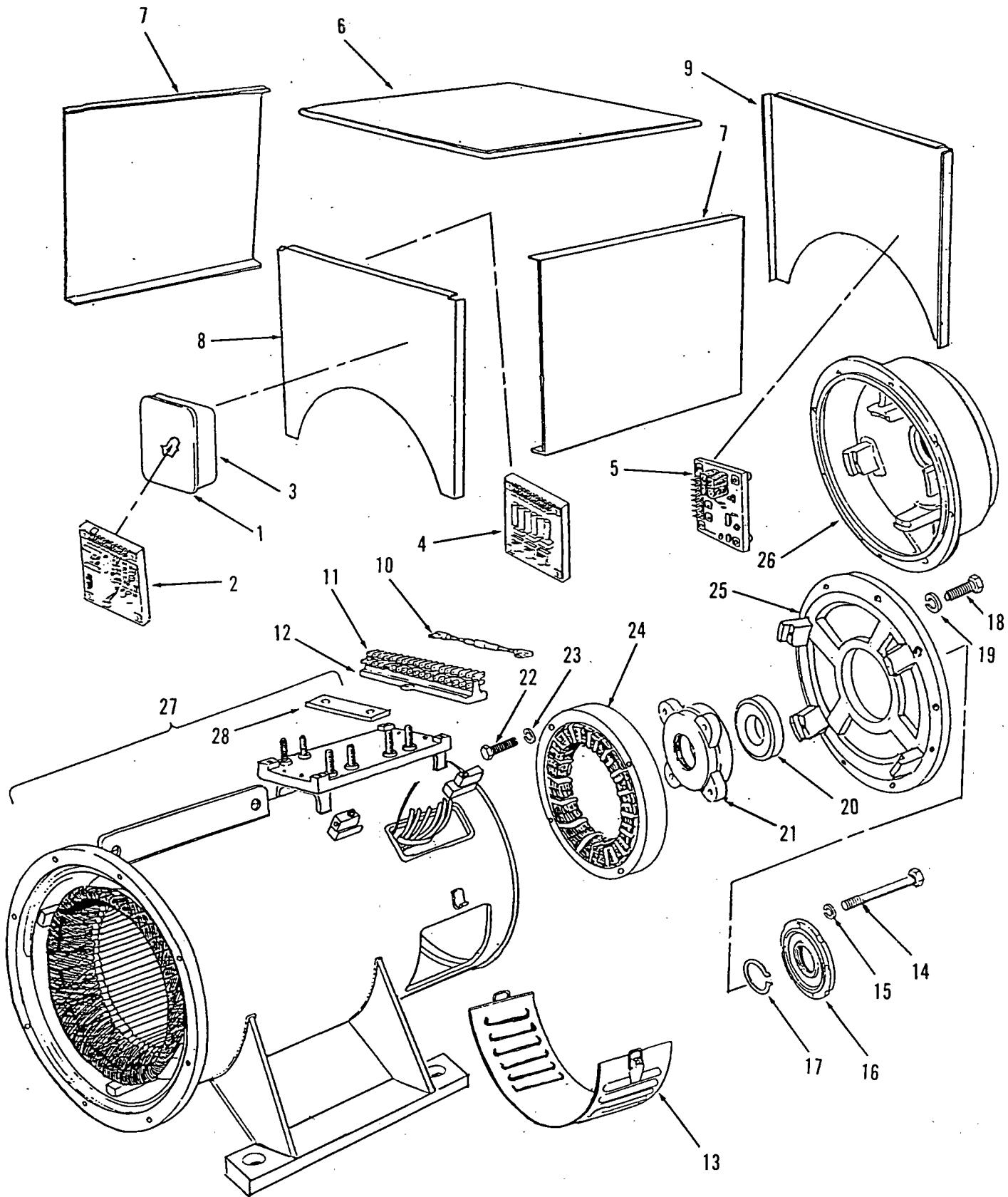


REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1		1	Module, Overspeed Switch (See Separate Page for Components)
	821-2045	4	Attaching Parts Screw, Self-locking - Hex Hd (M8 x 1.25 x 16mm)
2		1	Module, Overspeed Sensor (See Separate Page for Components)
	821-2045	4	Attaching Parts Screw, Self-locking - Hex Hd (M8 x 1.25 x 16mm)
3		1	Module, Permanent Magnet Exciter (See Separate Page for Components)
	249-0298	4	Attaching Parts Screw, Cap - Hex Head (M8 x 16mm)
	249-0218	4	Washer, Lock (M8)
	249-0315	4	Clamp, Retaining

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
4	Note 1		Generator (See Separate Pages for Stator and Rotor Components)
	800-0156	4	Attaching Parts Generator to Chassis Screw, Cap - Hex Head (3/4-10 x 2-1/2")
	850-0079	4	Washer, Lock - Spring (3/4")
	526-0238	4	Washer, Flat (3/4")
	862-0016	2	Nut, Hex (1/2-13)
	800-2088	12	Adapter to Flywheel Housing Screw, Cap - Hex Head (M10 x 1.5 x 35mm)
	850-2010	12	Washer, Lock - Spring (M10)
	805-0015	8	Drive Disc to Flywheel Bolt - Hex Head (3/8-16 x 3/4", Grade 8)
	526-0124	8	Washer, Flat (1-1/2"OD x 13/32"ID)

Note 1: For replacement Generator please supply the complete Gen Set nameplate and Generator nameplate data. The Replacement Generator will be shipped from closest warehouse or the factory. The replacement will not include PMG Exciter Module, Generator to Flywheel Housing Adapter, Drive Discs and Terminal Box.

Generator Stator Section

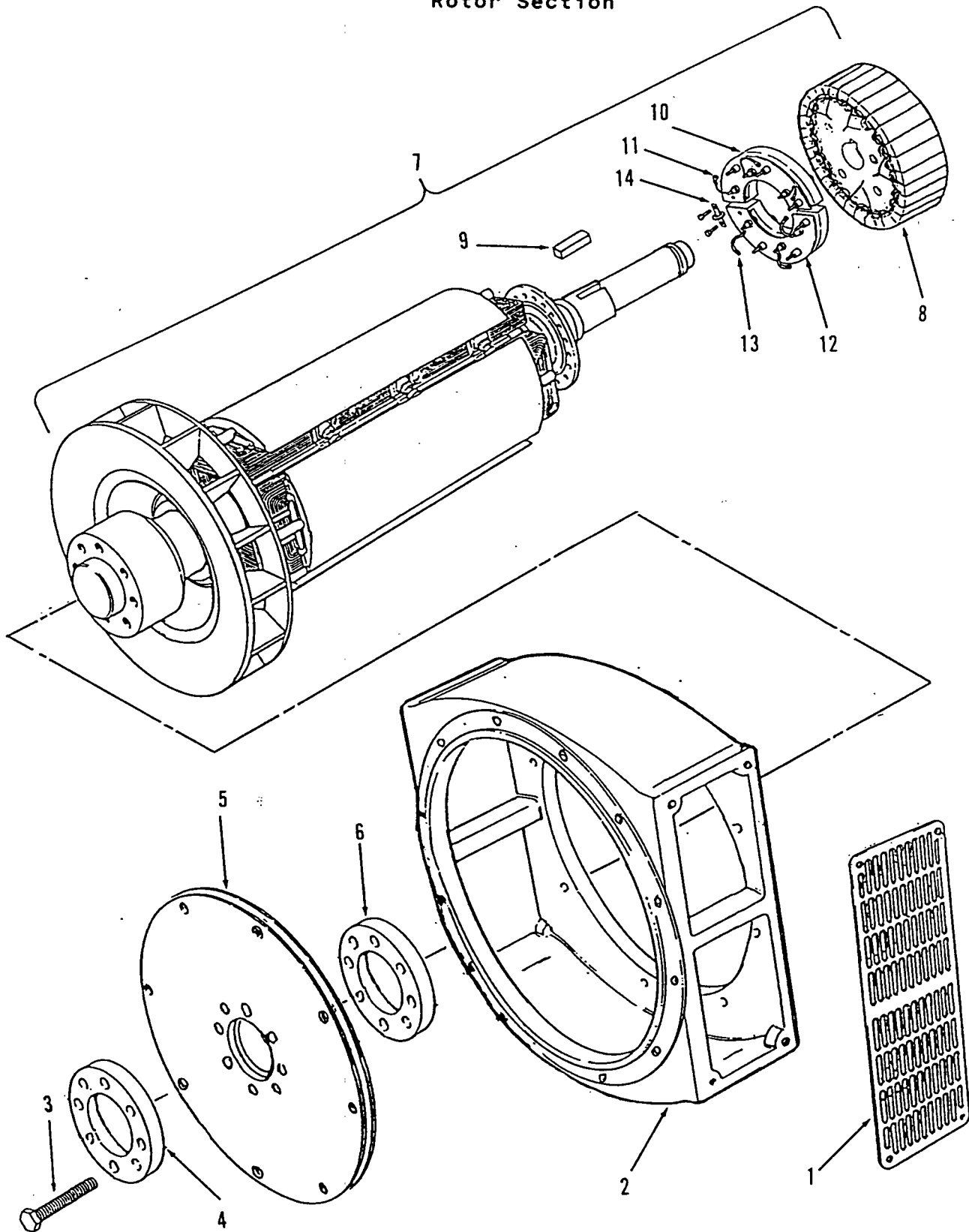


Generator Stator Section

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	249-0401	1	Lid	13	249-0368	2	Grille, Inlet - Air
	249-0304	4	Attaching Parts Screw, Captive	14	249-0302	4	Screw, Cap - Hex Head (M10 x 65mm)
2	305-0779	1	Regulator, Voltage	15	249-0202	4	Washer, Lock - Spring (M10)
	305-0778	1	Standard	16	249-0362	1	Cap, Bearing - Outer
			3 Phase (Used with PMG Exciter & 3 Phase Sensing Module)	17	249-0444	1	Circlip
	249-0398	4	Attaching Parts	18	249-0201	8	Screw, Cap - Hex Head (M10 x 35mm)
3	249-0564	1	Pillar, Threaded	19	249-0202	8	Washer, Lock - Spring (M10)
			Module, 3 Phase Sensing.	20	249-0312	1	Bearing, Ball
	249-0398	4	Attaching Parts	21	249-0361	1	Cap, Bearing - Inner
4	249-0395	1	Pillar, Threaded	22			Screw, Cap - Hex Head (M6 x 55mm) Standard Gen
5	300-3209-02	1	Box		249-0291	4	(M6 x 70mm) Ext Stack Gen
			Module, Frequency Detection	23	249-0212	4	Washer, Lock - Spring (M6)
			Attaching Parts	24			Stator, Exciter
	249-0295	4	Screw, Cap - Hex Head (M5 x 35mm)		249-0334	1	Standard Generator
	249-0288	4	Washer, Plastic (M5)		249-0366	1	Extended Stack Generator
	249-0287	4	Nut, Hex - Nylon (M5)	25	249-0354	1	Bracket, End-Standard Gen
6	NFS	1	Lid	26	249-0355	1	Bracket, End-Extended Stack Gen
7	NFS	2	Panel, Side	27	NFS	1	Stator, Generator (Includes Terminal Studs and Links)
8	NFS	1	Panel, Front				Attaching Parts Stator to Adapter
9	NFS	1	Panel, Rear		249-0201	8	Screw, Cap - Hex Head (M10 x 35mm)
10	249-0428	1	Resistor (Voltage Code H Only)		249-0202	8	Washer, Lock - Spring (M10)
11	249-0289	3	Block, Terminal - AUX	28	249-0404	4	Link, Terminal
12	249-0424	1	Base, Terminal - AUX				

NFS - Not For Sale

Generator Rotor Section

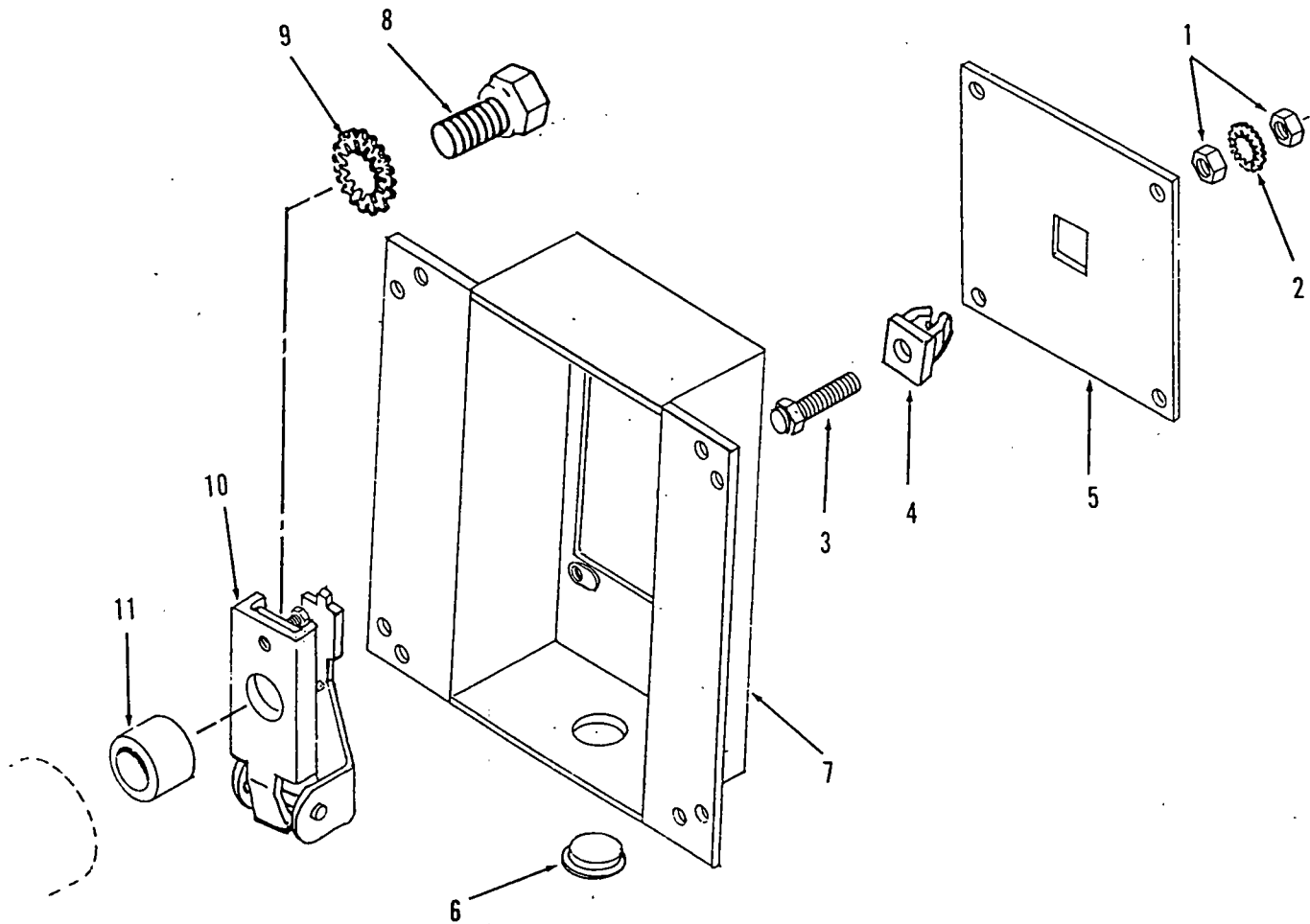


Generator Rotor Section

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	249-0341	2	Screen, Air - Adapter	8	249-0336	1	Rotor, Exciter (Does Not
			Attaching Parts				Include Rectifier Assy)
	249-0294	8	Screw, Cap - Hex Head	8a	249-0367	1	Standard Generator
			(M5 x 12mm)				Rotor, Exciter (Does Not
	249-0307	8	Washer, Lock - Spring (M5)				Include Rectifier Assy)
	249-0308	8	Washer, Flat (M5)				Extended Stack Generators
2	249-0370		Adapter, Generator	9	249-0271	1	Key
3	249-0290	8	Screw, Cap - Hex Head	10	249-0340	1	Rectifier Assy, Forward
			(M16 x 75mm)				(Includes Item 11 Diodes)
4	249-0402	1	Plate, Pressure	11	249-0281	1	Set, Forward Polarity Diode
5	249-0327	3	Disc, Drive	12	249-0341	1	Rectifier Assy, Reverse
6	249-0364	1	Spacer				(Includes Item 13 Diodes)
7	NFS	1	Rotor, Generator (Includes	13	249-0282	1	Set, Reverse Polarity Diode
			Exciter, Key, and Rectifier	14	249-0283	1	Varister
			Assemblies)				Attaching Parts
					249-0294	2	Screw, Cap - Hex Head
							(M5 x 12mm)

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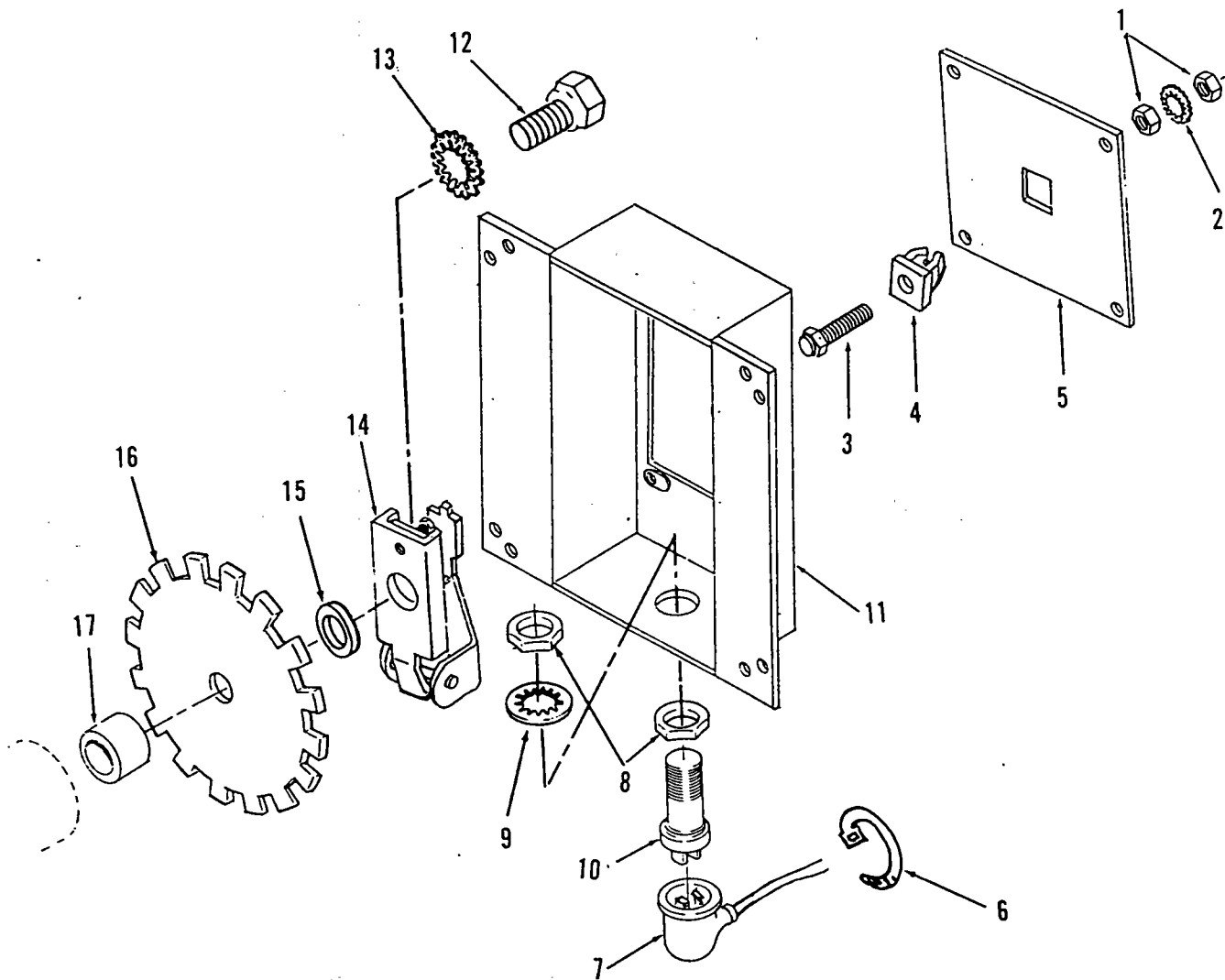
Generator Overspeed Switch



REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	862-0001	2	Nut, Hex (1/4-20)
2	853-0013	1	Washer, Lock - EIT (1/4")
3	150-0723	1	Point, Overspeed
4	870-0250	1	Nut, Insulated
5	150-2206	1	Plate, Mounting
	821-0005	4	Screw, Self-locking - Hex (#10-32 x 1/2")

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
6	517-0136	1	Plug, Plastic
7	150-2207	1	Cover, Overspeed Switch
8	718-1058	1	Screw, Cap - Hex Head (M10 x 1.5 x 45mm)
9	856-0010	1	Washer, Lock - EIT (3/8")
10	150-0956	1	Switch, Overspeed
11	370-4032	1	Spacer, Sleeve

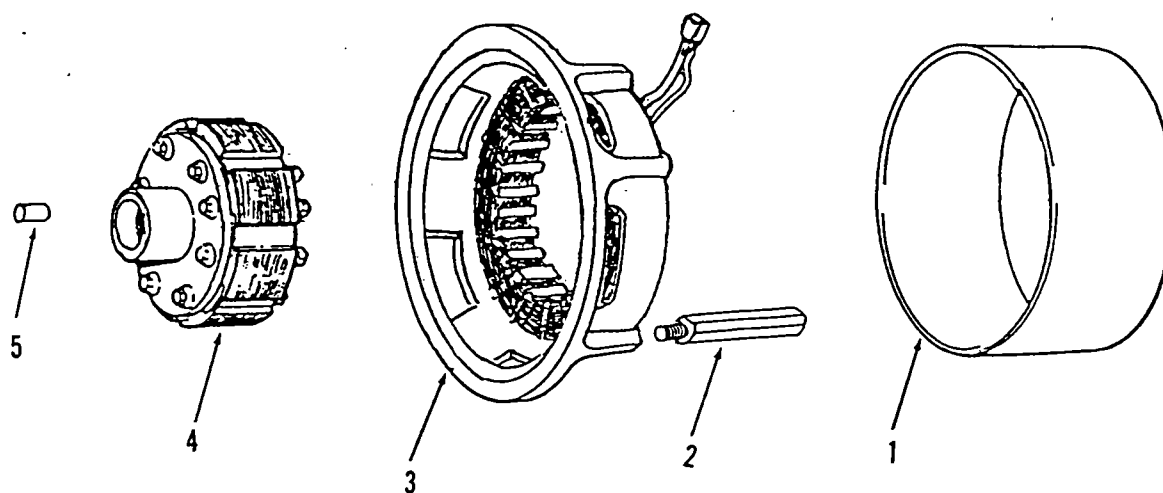
Generator Overspeed Sensor



REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	862-0001	2	Nut, Hex (1/4-20)
2	853-0013	1	Washer, Lock - EIT (1/4")
3	150-0723	1	Point, Overspeed
4	870-0250	1	Nut, Insulated
5	150-2206	1	Plate, Mounting
	821-0005	4	Screw, Self-locking - Hex (#10-32 x 1/2")
6	332-1445	5	Tie, Cable
7	338-2189-02	1	Harness, Wiring
8	868-0011	2	Nut, Jam - Hex (3/4-16)

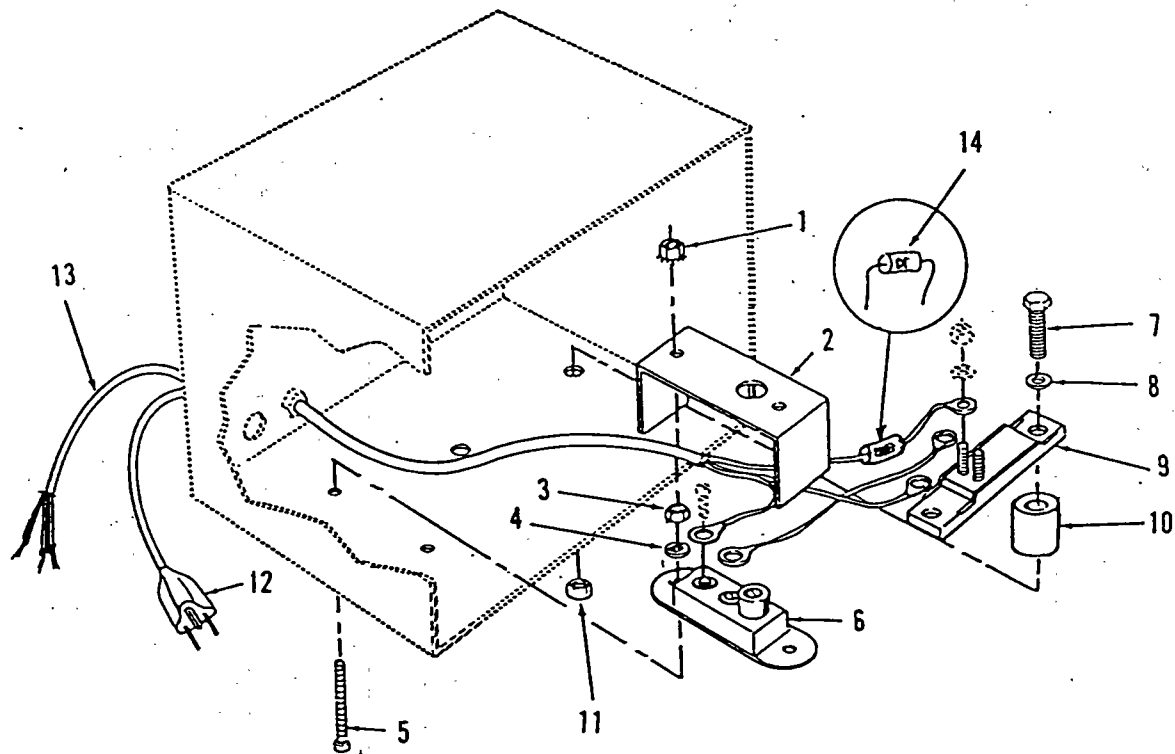
REF NO.	PART NO.	QTY USED	PART DESCRIPTION
9	854-0031	1	Washer, Lock - IT (3/4")
10	150-1406	1	Sensor, Speed
11	150-2207	1	Cover, Overspeed Switch
12	718-1058	1	Screw, Cap - Hex Head (M10 x 1.5 x 45mm)
13	856-0010	1	Washer, Lock - EIT (3/8")
14	150-0956	1	Switch, Overspeed
15	370-4031	1	Spacer, Sleeve
16	150-2204	1	Wheel - Speed Sensor
17	370-4032	1	Spacer, Sleeve

Generator Permanent Magnet Exciter



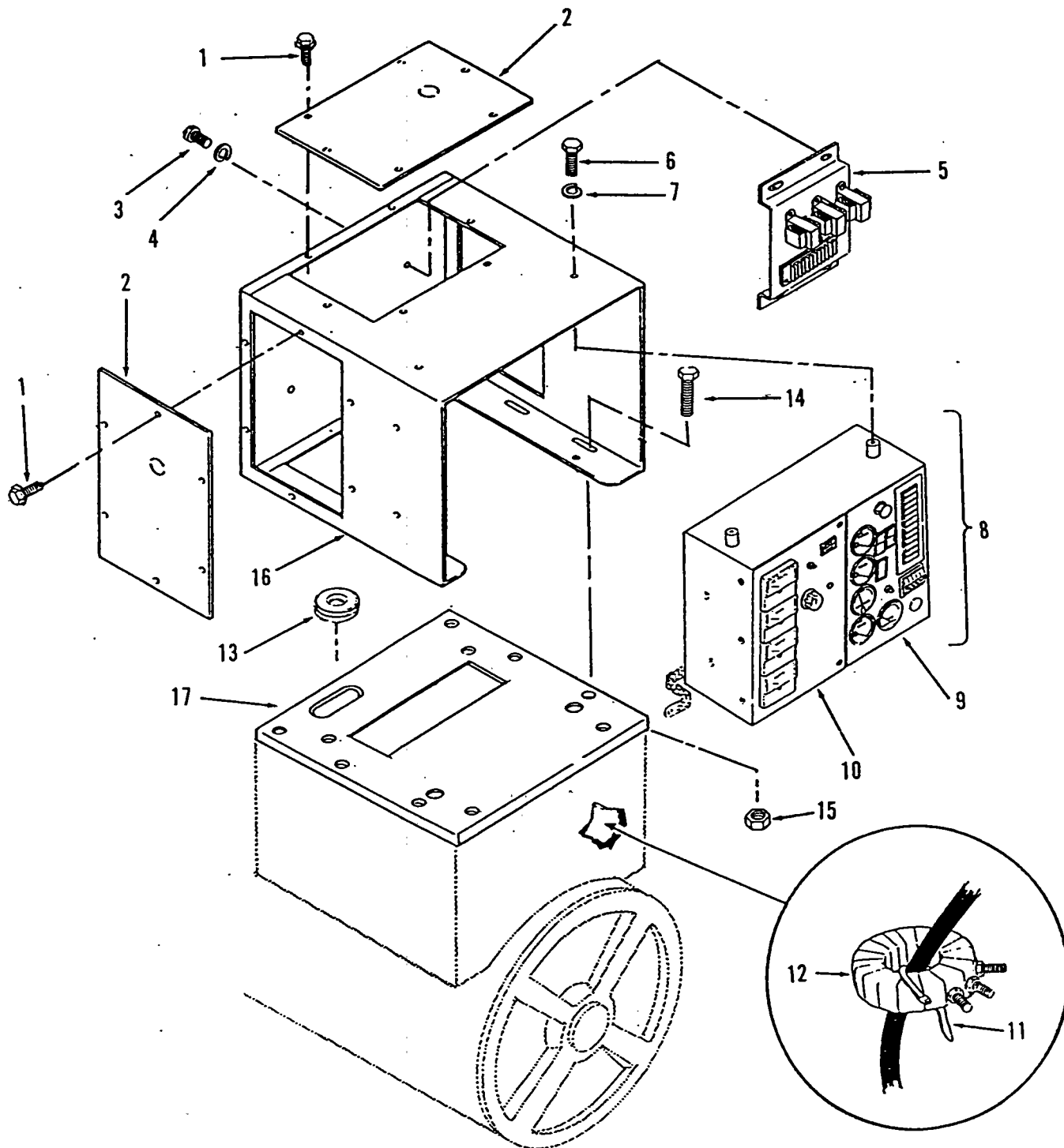
REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	249-0422	1	Cover	3	249-0426	1	Stator, Exciter with Frame
	249-0294	3	Screw, Cap - Hex Head (M5 x 12mm)	4	249-0427	1	Rotor, Exciter
	249-0307	3	Washer, Lock (M5)		249-0399	1	Bolt
2	249-0423	3	Pillar, Threaded		249-0202	1	Washer, Lock (M10)
				5	249-0313	1	Pin, Dowel

Control Heater



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	870-0183	2	Nut, Self-locking - Hex (#6-32)	9	333-0151	1	Heater, Electrical 120VAC
2	301-1886	1	Cover		333-0378	1	240VAC
3	860-0006	1	Nut, Hex (#6-32)	10	130-1107	2	Spacer
4	854-0006	2	Washer, Lock - IT (#6)	11	870-0257	2	Nut, Self-locking - Hex (5/16-18)
5	812-0070	2	Screw, Machine - Round Head (#6-32 x 1-1/4")	12	335-0161	1	Cable, Electrical (120VAC Application)
6	309-0128	1	Thermostat, Adjustable	13	338-2121	1	Harness Wiring with Diode, less plug (240VAC Application)
7	800-0034	2	Screw, Cap - Hex Head (5/16-18 x 2-1/4")	14	357-0013	1	Diode
8	526-0113	2	Washer, Flat (5/16")	15	98-3232	1	Decal, Warning - Shock Hazard (Not Illustrated)

Generator Set Control

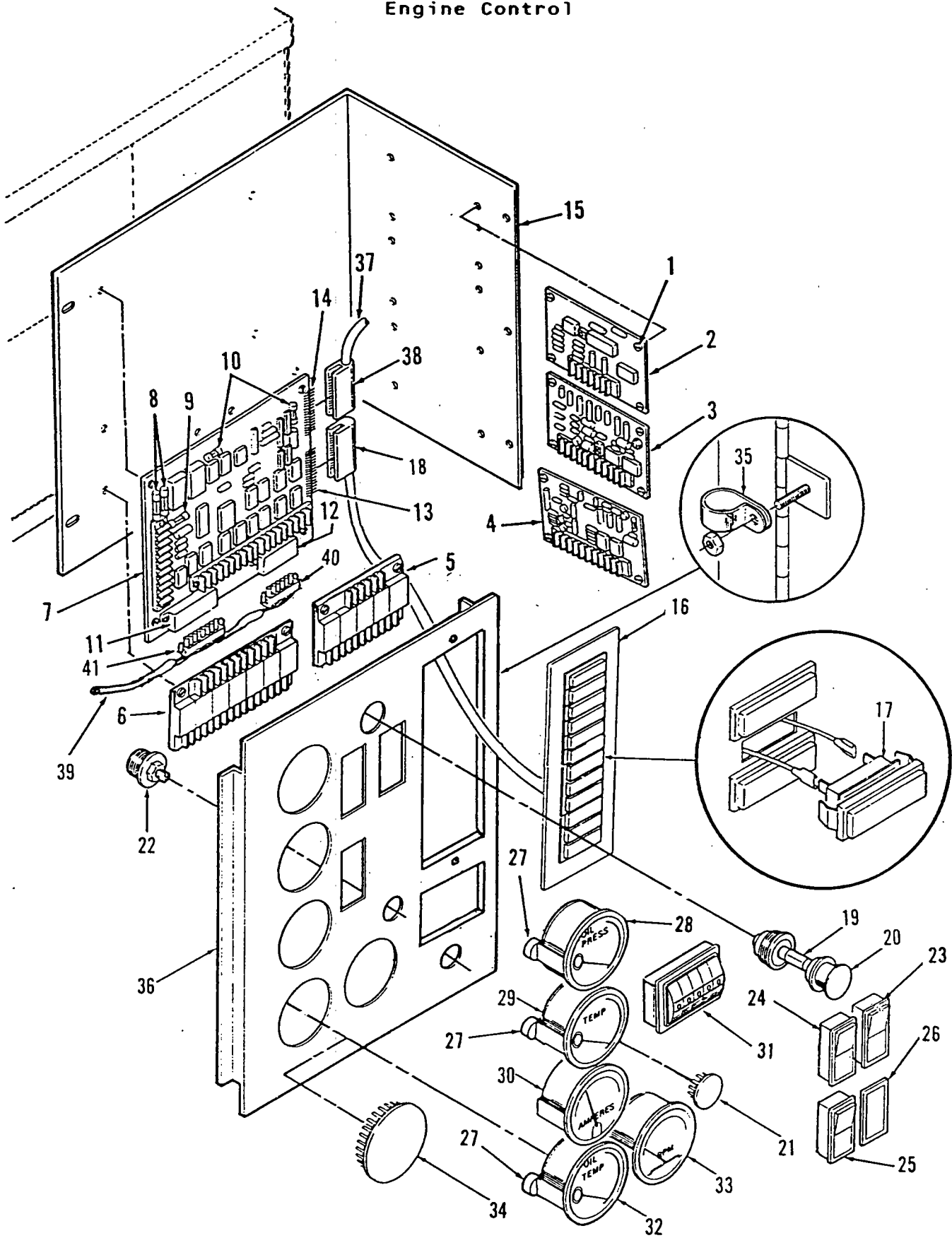


Generator Set Control

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	821-0005	18	Screw, Self-locking - Hex (#10-32 x 1/2")	10	NFS	1	Control, Generator (See Separate Page for Components)
2	NFS	3	Panel, Box - Control	11	332-0941	6	Tie, Cable
3	812-0156	4	Screw, Machine - Round Head (1/4-20 x 1/2")	12			Transformer, Current - Reconnectible
4	850-0040	4	Washer, lock - Spring (1/4")		302-1794-02	3	80kW Voltage Code H
5	NFS	1	Transformer Assy, Potential (See Separate Page for Components)		302-1794-03	3	65 & 80kW Voltage Code L, 65 & 80kW Voltage Code Z, 100kW Voltage Code H.
6	800-0051	4	Screw, Cap - Hex Head (5/16-18 x 1/2")		302-1794-04	3	85 & 100kW Voltage Code L, 85 & 100kW Voltage Code Z.
7	850-0045	4	Washer, Lock - Spring (5/16")	13	508-0051	1	Grommet
8	NFS	1	Control, Set (See Item 9 & 10 for Components)	14	821-0018	6	Screw, Self-locking - Hex Head (1/4-20 x 5/8")
9	NFS	1	Control, Engine (See Separate Page for Components)	15	870-0212	6	Nut, Self-locking - Hex (1/4-20)
				16	NFS	1	Housing, Control
				17	NFS	1	Adapter, Housing to Terminal Box

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Engine Control

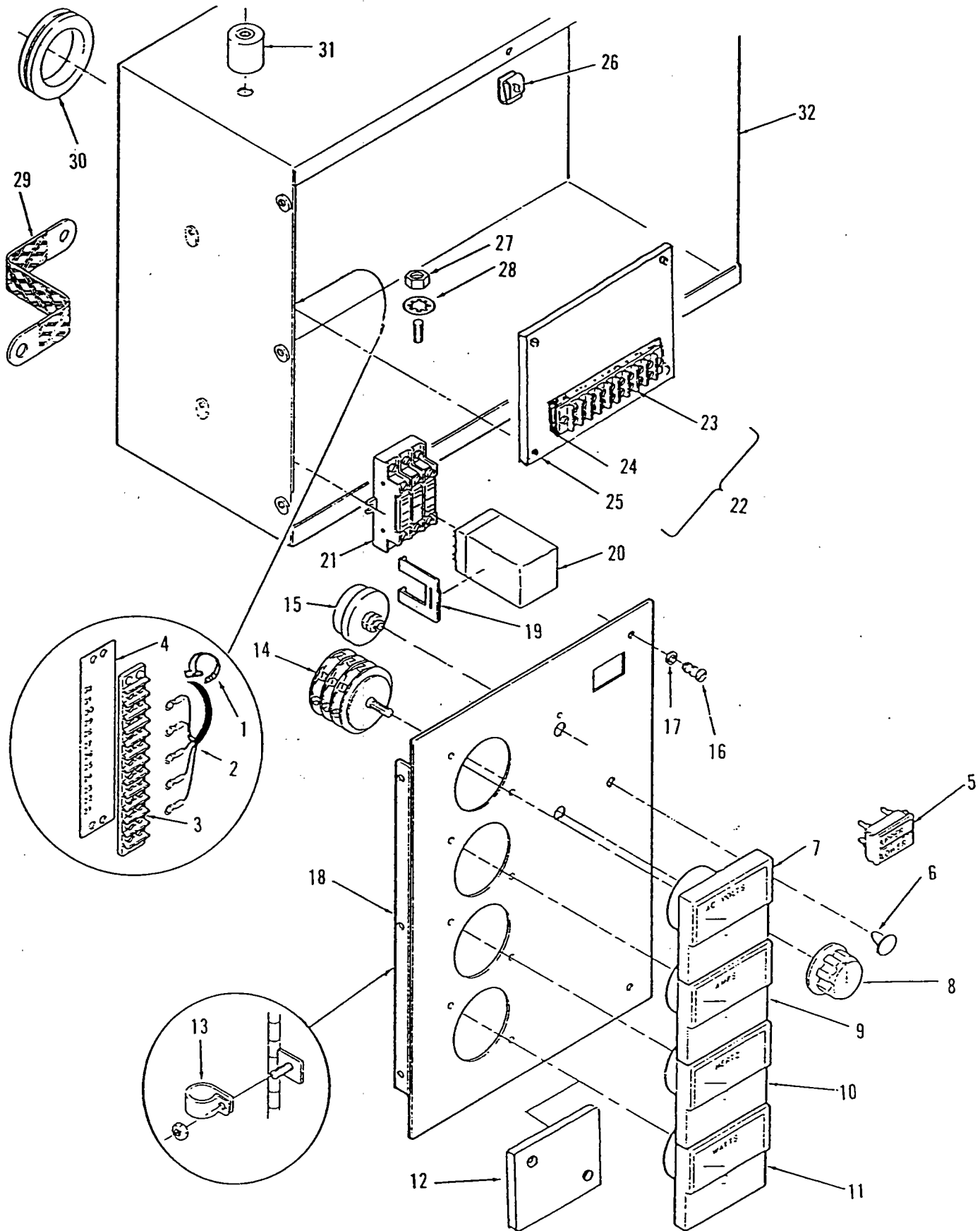


Engine Control

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	815-0544	24	Screw, Machine - Round Head With IT Lock Washer (#6-32 x 1/2")	17	322-0369-02	12	Lamp, Incandescent - 1/3 Watt 28 VDC
2	300-2899	1	Board, Time Delay, Start/Stop - 24 VDC (A15)	18	323-1310	1	Housing, 13 Pin (J3)
3			Board, Magnetic Sensor, Start Disconnect/Over Speed Sensor (A16)	19	322-0017	1	Contact, Pin
	300-2903	1	Standard	20	322-0361	1	Lamp, Incandescent - 28 VDC (DS11)
	300-2904	1	Precision	21	517-0131	1	Holder, Lamp
4	300-2906	1	Board, Over-Under Voltage Sensor - 24 VDC (A17)	22	303-0280	1	Plug, Button
5	300-2856	1	Board, Relay - 24 VDC (A13)	23	308-0785	1	Potentiometer (R11)
6	300-2863	1	Board, Relay - 24 VDC (A14)	24	308-0784	1	Switch, Push (S11)
7			Board, Engine Monitor (A11) (Includes Fuses and Connectors)	26	301-6257	1	Switch, Push (S12)
	300-2808	1	24 VDC, 2 Light	27	193-0250	1	Cover
	300-2812	1	24 VDC, 12 Light	28	193-0352	3	Resistor, Gauge (R12)
8	321-0270	2	Fuse, Cartridge - 20 Amp (F1, F2)	29	193-0351	1	Gauge, Pressure - Oil (M11)
9	321-0231	1	Fuse, Cartridge - 15 Amp (F3)	30	302-1790	1	Gauge, Temperature - Water (M12)
10	321-0094	2	Fuse, Cartridge - 5 Amp (F4, F5)	31	302-0885	1	Ammeter (M13)
11	323-1305	1	Connector, 8 Pin (P1)		815-0385	2	Meter, Totalizing - Time (M14)
12	323-1303	1	Connector, 6 Pin (P2)		870-0183	2	Screw, Machine - Round Head (#6-31 x 1/2")
13	323-1309	1	Connector, 13 Pin (P3)	32	193-0330	1	Nut, Hex with ET Lockwasher (#6-32)
14	323-1307	1	Connector, 12 Pin (P4)	33	302-1715	1	Gauge, Temperature - Oil (M15)
15	NFS	1	Bracket, Mounting	34	517-0221	1	Tachometer (M16)
	821-0004	4	Screw, Self-locking - Hex Hd (#10-32 x 5/16")	35	322-0052	1	Plug, Button
16			Module, Indicator - Fault (Includes Replaceable Lamps, Harness with Connector Housing & Contact Pins)(A12)		870-0131	1	Clamp, Loop
	322-0358-02	1	24 VDC, 2 Light	36	NFS		Nut, Hex with ET Lockwasher (#10-32 x 1/2")
	322-0360-02	1	24 VDC, 12 Light	37	338-1817	1	Door, Control
	815-0385	2	Screw, Machine - Round Head (#6-32 x 1/2")	38	323-1308	1	Harness, Wiring - DC Meter (Includes Connector & Pins)
	870-0183	2	Nut, Self-locking - Hex (#6-32)	39	323-1302	12	Housing, 12 Pin (J4)
					323-1302	12	Contact, Pin
					338-2171	1	Harness, Wiring - Control to Engine (Includes Connectors and Pins)
				40	323-1304	1	Housing, 6 Pin
					323-1200	6	Contact, Pin
				41	323-1306	1	Housing, 8 Pin
					323-1200	8	Contact, Pin

NFS - Not For Sale

Generator Control

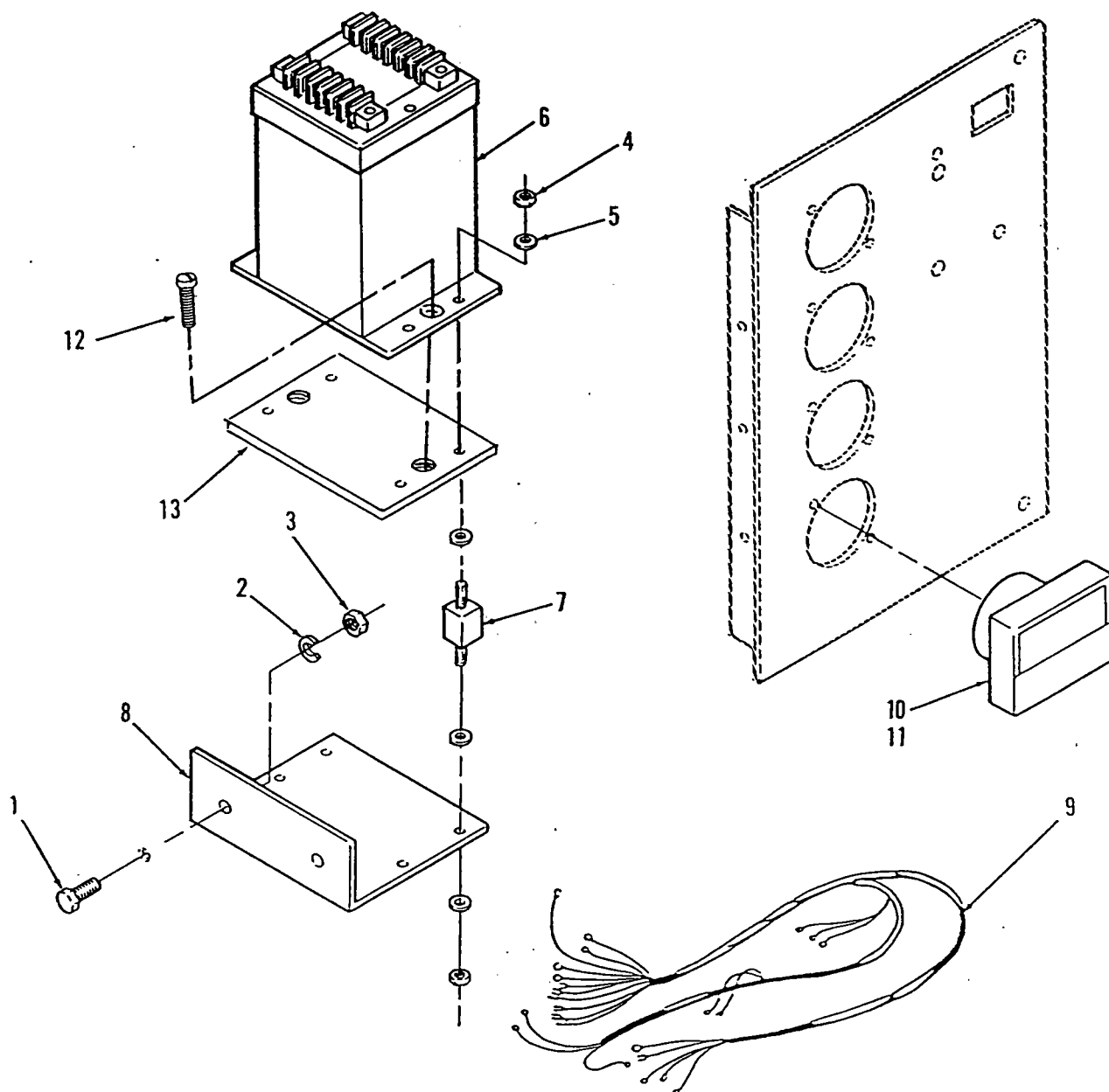


Generator Control

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	332-1445	2	Tie, Cable	14	308-0284	1	Switch, Rotary (S21)
2			Harness, Wiring	15	303-0261	1	Rheostat (R21)
	338-1818	1	Control with Meters (Includes Terminal Block)	16	406-0334	2	Clip, Fastener
	338-1853	1	Control without Meters	17	406-0333	2	Stud, Fastener
	812-0065	2	Screw, Machine - Round Head (#6-32 x 5/8")	18	NFS	1	Door, Control
3	332-0607	1	Block, Terminal (TB1)		821-0004	3	Screw, Self-locking - Hex (#10-32 x 5/16")
4	332-2723	1	Strip, Marker	19	307-1987	2	Clip, Relay
5	322-0363	1	Light, Indicator - Dual (DS21, DS22)	20	307-1056	1	Relay, 24 VDC (K21)
6	517-0131	1	Plug, Button	21	323-0804	1	Socket, Relay
7			Voltmeter (M21)		815-0544	2	Screw, Machine - Round Head with IT Lock Washer (#6-32 x 1/2")
	302-1148	1	Dual Scale 0-300/0-600V	22	NFS	1	Terminal Board Assembly
	302-1753	1	Single Scale 0-750V		812-0065	4	Screw, Machine - Round Head (#6-32 x 5/8")
8	303-0032	1	Knob	23	332-0751	1	Block, Terminal
9			Ammeter (M22)		812-0066	2	Screw, Machine - Round Head (#6-32 x 3/4")
			Single Scale Voltage Code H	24	332-0853	1	Strip, Marker
	302-1691	1	80kW, 0-100 Amp	25	NFS	1	Plate
	302-1805-02	1	100kW, 0-150 Amp	26	406-0332	2	Receptacle, Fastener
			Dual Scale Volt. Codes L & Z	27	871-0015	1	Nut, Hex (1/4-20)
	302-1684	1	65 & 80kW, 0-150/0-300 Amp	28	853-0013	1	Washer, Lock - ET (1/4")
	302-1685	1	85 & 100kW, 0-200/0-400 Amp	29	337-0049	1	Strap, Electrical (Ground)
10	302-1720	1	Meter, Frequency (M23)		800-0024	1	Screw, Cap - Hex Head (5/16-18 x 1/2")
11		1	Wattmeter (M24) (See Separate page for Components)		856-0008	1	Washer, Lock - EIT (5/16")
12	NFS	1	Cover, Meter Hole	30	508-0051	1	Grommet
	815-0385	2	Screw, Machine - Round Head, Black (#6-32 x 1/2")	31	402-0527	2	Mount, Vibration
	870-0183	2	Nut, Hex with ET Lockwasher (#6-32)		800-0051	4	Screw, Cap - Hex Head (5/16-18 x 1/2")
13	332-0052	1	Clamp, Loop		850-0045	4	Washer, Lock - Spring (5/16")
	870-0131	1	Nut, Self-locking - Hex with ET Lock Washer (#10-32)	32	NFS	1	Box, Control

NFS - Not For Sale

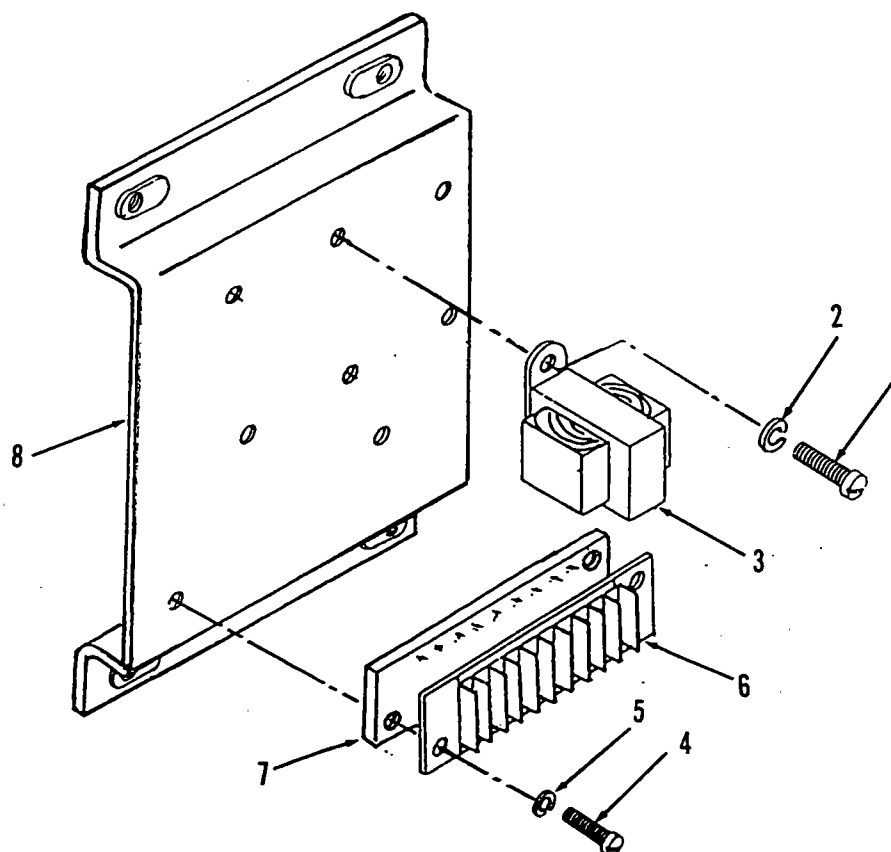
Wattmeter



REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	821-0017	2	Screw, Cap - Hex Head (5/16-18 x 1/2")
2	850-0045	2	Washer, Lock (5/16)
3	862-0014	2	Nut, Hex (5/16-18)
4	860-0008	8	Nut, Hex (#8-32)
5	856-0002	16	Washer, Lock - ET (#8)
6	302-1833-01	1	Transducer, Watt
7	402-0354	4	Mount, Shock

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
8	301-6987	1	Bracket, Mounting
9	338-1936	1	Harness, Wiring
10	302-1722	1	Wattmeter (Less Dial)
11	302-1721-04	1	Dial, Wattmeter
	302-1721-05	1	DNDA, DWDA
12	813-0102	2	DNDB, DWDB
			Screw, Machine - Round Head (#10-32 x 3/8")
13	319-0030	1	Plate, Support - Transducer

Potential Transformer



REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	812-0079	6	Screw, Machine - Round Head (#8-32 x 1/2")
2	850-0025	6	Washer, Lock - Spring (#8)
3	315-0642	3	Transformer, Potential
4	812-0077	2	Screw, Machine - Round Head (#8-32 x 3/8")

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
5	850-0025	2	Washer, Lock - Spring (#8)
6	332-2562	1	Block, Terminal (10 Place)
7	332-2563	1	Strip, Marker
8	NFS	1	Bracket, Mounting

NFS - Not For Sale

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Parts Catalog

DNEA / DWEA
DNFA / DWFA

PMG GENERATOR SET



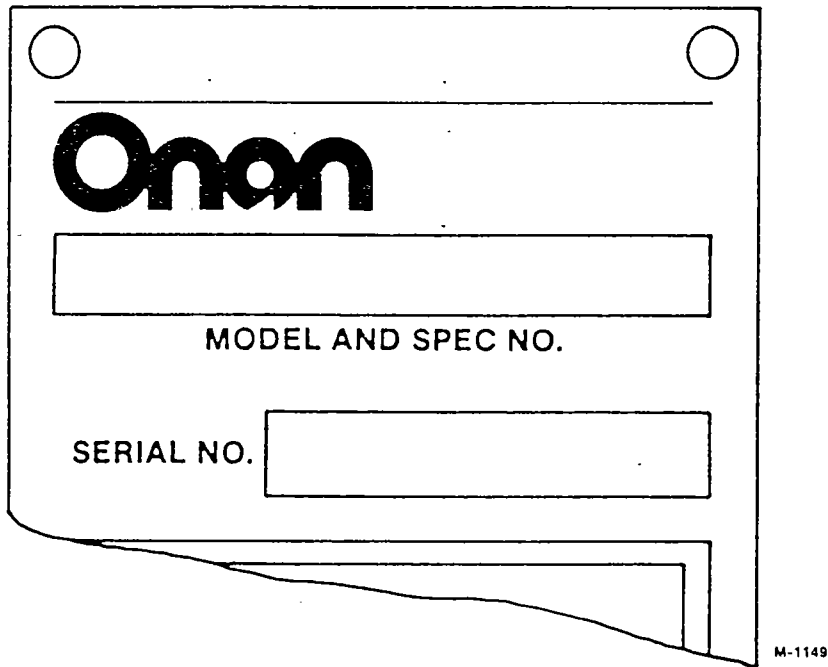
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General Information

For parts or service, contact the dealer from whom you purchased this equipment or refer to your Nearest Authorized Onan Parts and Service Center.

To avoid errors or delay in filling your parts order, always give the MODEL, SPEC NO. and SERIAL NO. from the Onan nameplate.



A diagram of an Onan nameplate. It is a rectangular plate with two circular mounting holes at the top. The Onan logo is at the top left. Below it is a large rectangular box for the MODEL AND SPEC NO. Below that is a smaller rectangular box for the SERIAL NO. The bottom right corner of the plate is torn. The text 'M-1149' is printed at the bottom right of the plate.

Onan

MODEL AND SPEC NO.

SERIAL NO.

M-1149

For handy reference, insert "YOUR" nameplate information in the spaces above.

▲WARNING

TAKE ALL NECESSARY PRECAUTIONS WHEN CHECKING OR CHANGING ENGINE OIL NOT TO INGEST, BREATHE THE FUMES OR CONTACT THE OIL. USED ENGINE OILS HAVE BEEN IDENTIFIED BY FEDERAL AND SOME STATE AGENCIES AS CAUSING CANCER.

▲WARNING

TAKE ALL NECESSARY PRECAUTIONS WHEN HANDLING ENGINE GASKETS. DO NOT INGEST, BREATHE, OR CONTACT DUST FROM GASKETS. USE ADEQUATE VENTILATION AND WEAR PROTECTIVE GLOVES, MASK AND CLOTHING. ASBESTOS HAS BEEN IDENTIFIED BY FEDERAL AND SOME STATE AGENCIES AS CAUSING CANCER.

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Introduction

This Parts Manual applies to the Standard Gen Sets Listed below. The illustrations are arranged in groups of related items, and each part or assembly is identified by a Reference Number. All parts illustrated are typical, and unless otherwise mentioned in the description column the parts are interchangeable between models.

These typical illustrations are subject to change and reflect only the latest replacement parts arrangement. The Right and Left sides of the Set are determined by FACING the FRONT (Engine end) of the Set.

Set Data Table

ENGINE ID. No.	GEN SET ID No.	RPM RATING	BATTERY VOLTAGE
Note 1. 6CT-G*#	Note 2. 100.0DNEA/DWEA-@	1500 RPM	24 VDC
6CT-G*#	125.0DNEA/DWEA-@	1800 RPM	24 VDC
6CTA-G*#	135.0DNFA/DWFA-@	1500 RPM	24 VDC
6CTA-G*#	150.0DNFA/DWFA-@	1800 RPM	24 VDC

Note:1 * - Letter S for Standby, Letter C for Continious Duty applications

Note:1 # - Number 1 thru 9 used to denote size variations.

Note:2 @ - Numbers and a Letter are used to provide configuration identification. Voltage Codes follow Model Letter designations and separated from the Specification Number by a slant bar. The Specification Number: Number 1 is Standard, all others indicate configuration variations. The Specification Letter: Letter advances (A to B, B to C, etc) with major manufacturing changes.

Electrical Data Table

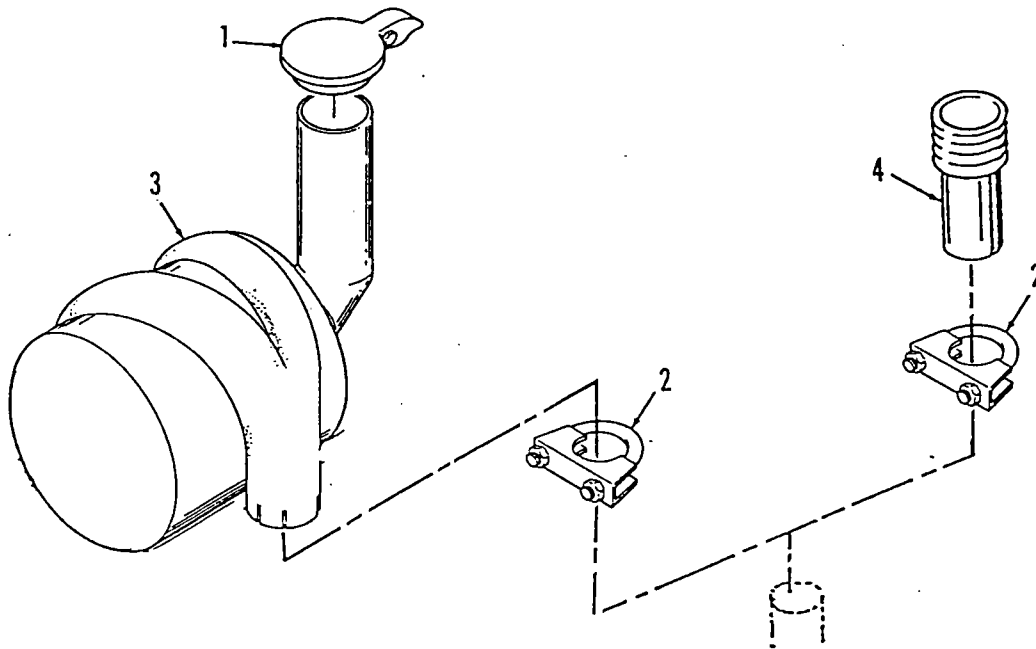
*VOLTAGE CODE	VOLTS	HERTZ	WIRE	PHASE	NOTES
H	347/600	60	4	3	
L	120/208	60	12	3	+
	127/220	60	12	3	
	139/240	60	12	3	
	240/416	60	12	3	
	254/440	60	12	3	
	277/480	60	12	3	
Z	110/190	50	12	3	+
	115/200	50	12	3	
	120/208	50	12	3	
	127/220	50	12	3	
	220/380	50	12	3	
	230/400	50	12	3	
	240/416	50	12	3	
	254/440	50	12	3	

+ - The Stators are Reconnectible.

Engine Replacement Parts

The Engine replacement parts can be ordered from the Cummins Engine Distributer except those parts modified or added during the Gen Set Assembly. When ordering engine parts, refer to the Engine Data plate and supply the Model, Serial, and CPL numbers. For assistance in ordering the Engine replacement parts, contact the nearest Cummins Engine Distributor or the Supplier from whom you purchased the Generator Set.

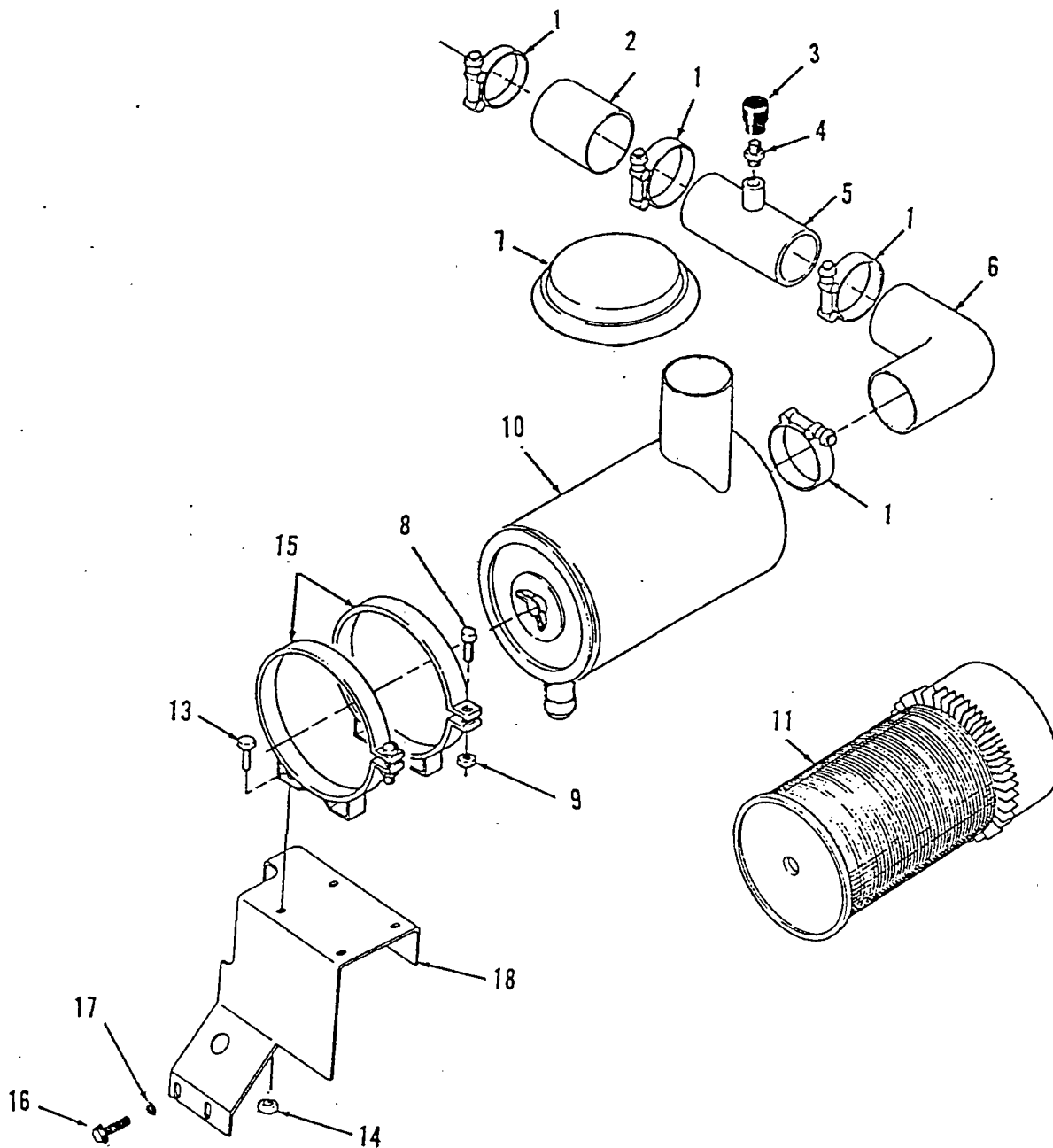
Exhaust System Components



REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	155-2062-07	1	Cap, Rain
2	155-2305	1	Clamp, Muffler

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
3			Silencer
	155-2306	1	6CT Engine (D EA Set)
	155-2307	1	6CTA Engine (D FA Set)
4	154-2304	1	Adapter, Exhaust

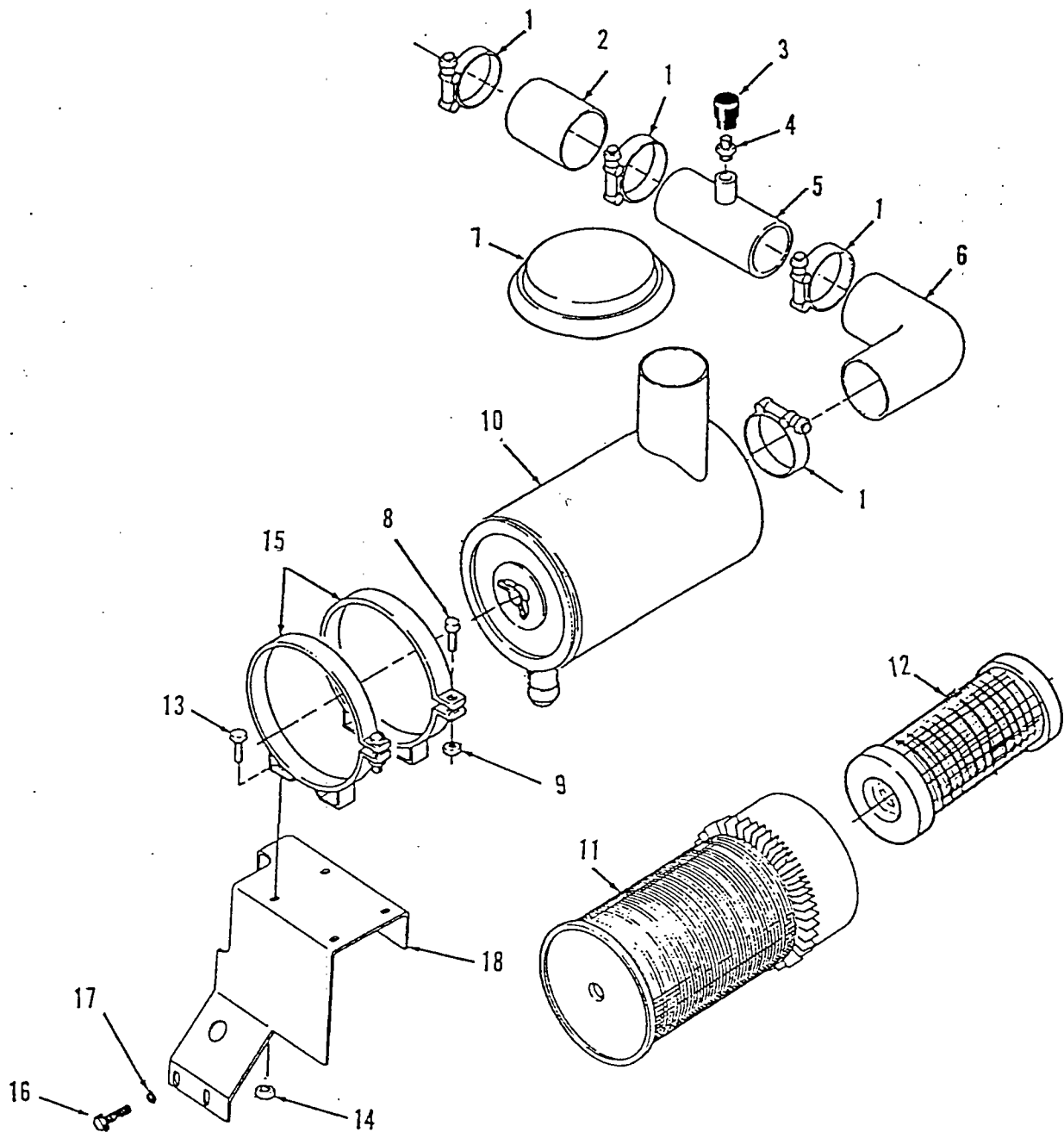
Air Cleaner - Standard



REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	503-0900	4	Clamp, Hose
2	503-1595	1	Hose
3	140-1548	1	Indicator, Service
4	140-1260	1	Adapter, Filter - Indicator
5	140-2238	1	Tube, Inlet - Air
6	503-1354	1	Elbow, Rubber - Molded
7	140-1601	1	Hood, Inlet - Air
8	815-0115	2	Screw, Machine - Fillister Head (1/4-20 x 1")
9	863-0002	2	Nut, Square (1/4-20)
10	140-2240	1	Cleaner, Air (Includes Element)

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
11	140-2241	1	Element, Air Cleaner
13	821-0029	4	Screw, Self-locking - Hex Washer Head (3/8-16 x 3/4")
14	870-0281	4	Nut, Lock (3/8-16)
15	140-1973	2	Band, Mounting
16	800-2110	3	Screw, Cap - Hex Head (M12 x 1.75 x 20mm)
17	850-2012	3	Washer, Lock (M12)
18	140-2239	1	Bracket, Mounting - Air Cleaner

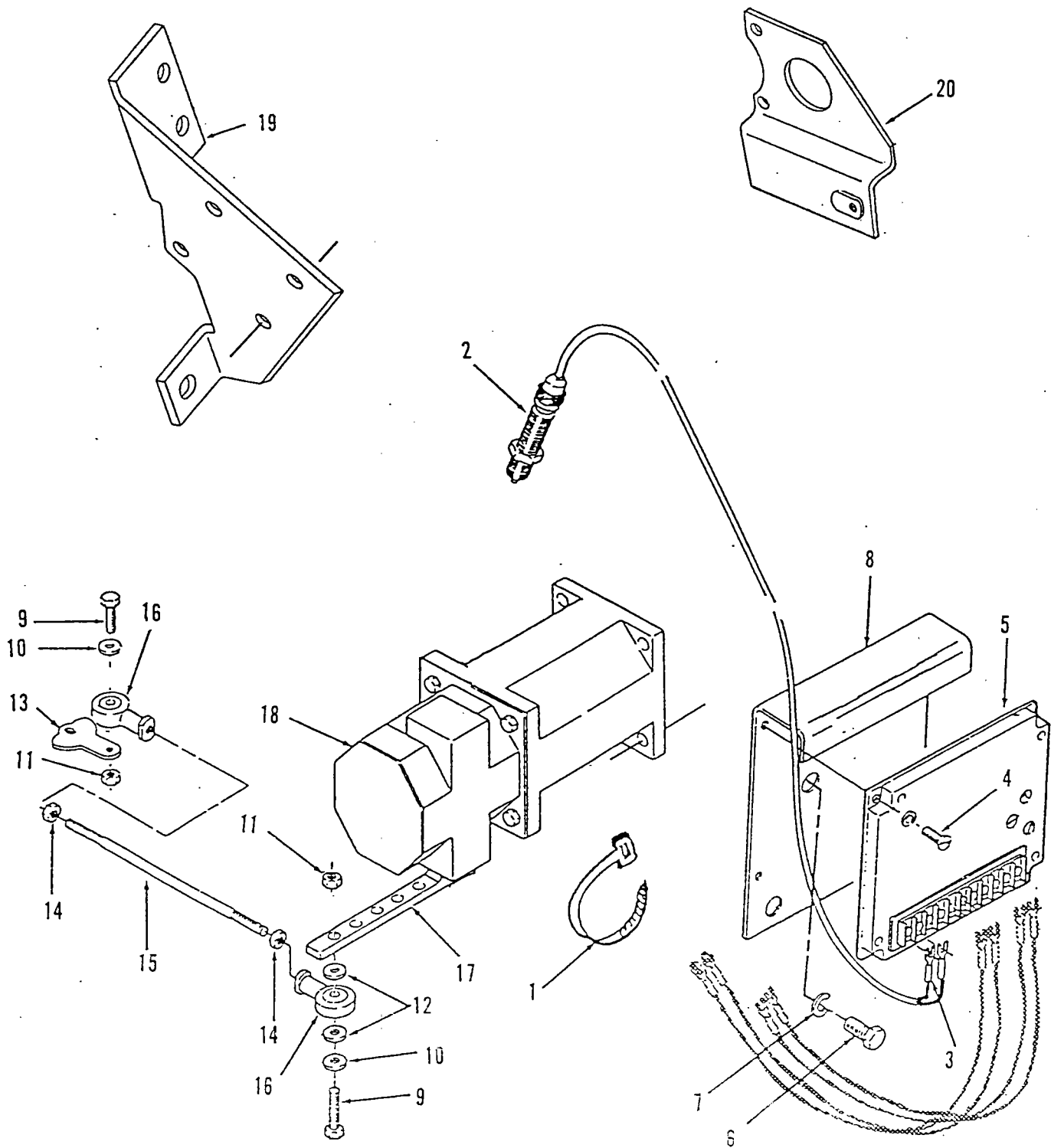
Air Cleaner - Heavy Duty



REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	503-0900	4	Clamp, Hose
2	503-1595	1	Hose
3	140-1548	1	Indicator, Service
4	140-1260	1	Adapter, Filter - Indicator
5	140-2238	1	Tube, Inlet - Air
6	503-1354	1	Elbow, Rubber - Molded
7	140-1601	1	Hood, Inlet - Air
8	815-0115	2	Screw, Machine - Fillister Head (1/4-20 x 1")
9	863-0002	2	Nut, Square (1/4-20)
10	140-2240	1	Cleaner, Air (Includes Element)

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
11	140-2241	1	Element, Air Cleaner Primary (Outer)
12	140-2251	1	Element, Air Cleaner Secondary (Inner)
13	821-0029	4	Screw, Self-locking - Hex Washer Head (3/8-16 x 3/4")
14	870-0281	4	Nut, Lock (3/8-16)
15	140-1973	2	Band, Mounting
16	800-2110	3	Screw, Cap - Hex Head (M12 x 1.75 x 20mm)
17	850-2012	3	Washer, Lock (M12)
18	140-2239	1	Bracket, Mounting - Air Cleaner

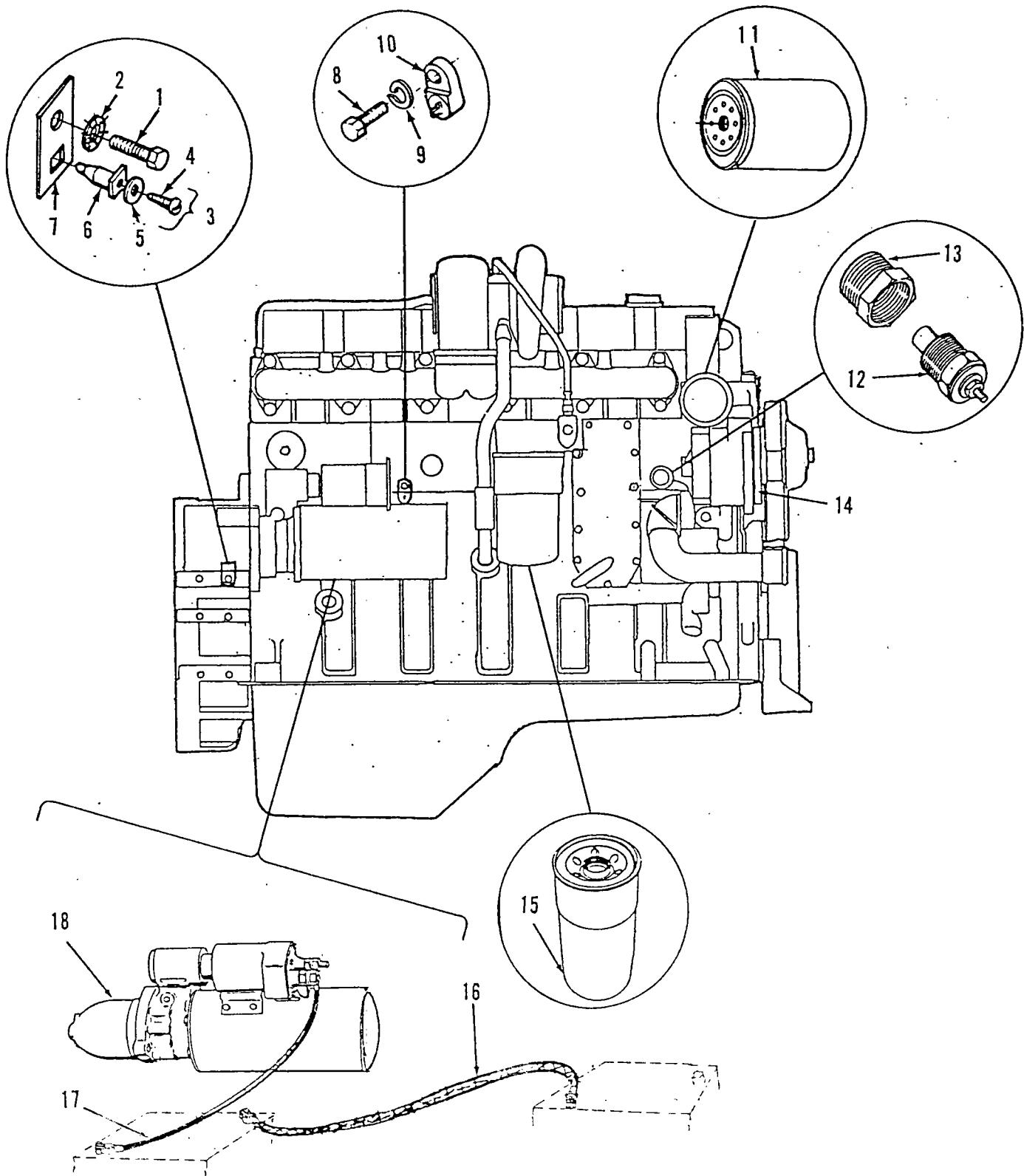
Electronic Governor



Electronic Governor

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	332-1445	5	Tie, Cable	15	150-2218-03	1	Rod, Governor
2	150-2201	1	Sensor, Speed (Includes Electrical Lead)	16	150-2251	2	End, Rod
3	332-1279	2	Terminal (Use on Electrical Leads)	17	150-2203	1	Lever, Actuator - Governor
4	813-0103	4	Screw, Machine - Round Head (#10 - 32 x 3/4")	18	151-0612	1	Actuator, Governor - 24VDC
5	151-0611	1	Control, Governor		800-0008	4	Attaching Parts for Actuator
6	800-2110	2	Screw, Cap - Hex Head (M12 x 1.75 x 20mm)		870-0212	4	Screw, Cap - Hex Head (1/4 - 20 x 1-1/4")
7	850-2012	2	Washer, Lock (M12)	19	150-2238	1	Nut, Lock (1/4 - 20)
8	150-2007	1	Bracket, Controller		800-2085	3	Bracket, Governor Actuator
9	815-0172	2	Screw, Machine - Hex Head (#10 - 32 x 1.00")		850-2010	3	Attaching Parts for Bracket
10	526-0327	2	Washer, Flat (15/64)	20	150-2252	1	Screw, Cap - Hex Head (M10 x 1.50 x 20mm)
11	870-0131	2	Nut, Hex W/ET (#10 - 32)		718-1021	1	Washer, Lock (M10)
12	526-0008	4	Washer, Flat (#10)		718-1027	1	Bracket
13	150-2237	1	Lever, Governor		860-2007	2	Attaching Parts for Bracket
14	870-0053	2	Nut, Screw - Hex Head (#10 - 32)				Screw, Cap - Hex Head (M6 x 1.0 x 20mm)
							Screw, Cap - Hex Head (M6 x 1.0 x 50mm)
							Nut, Hex (M6 x 1.0)

External Engine Components
Left Side



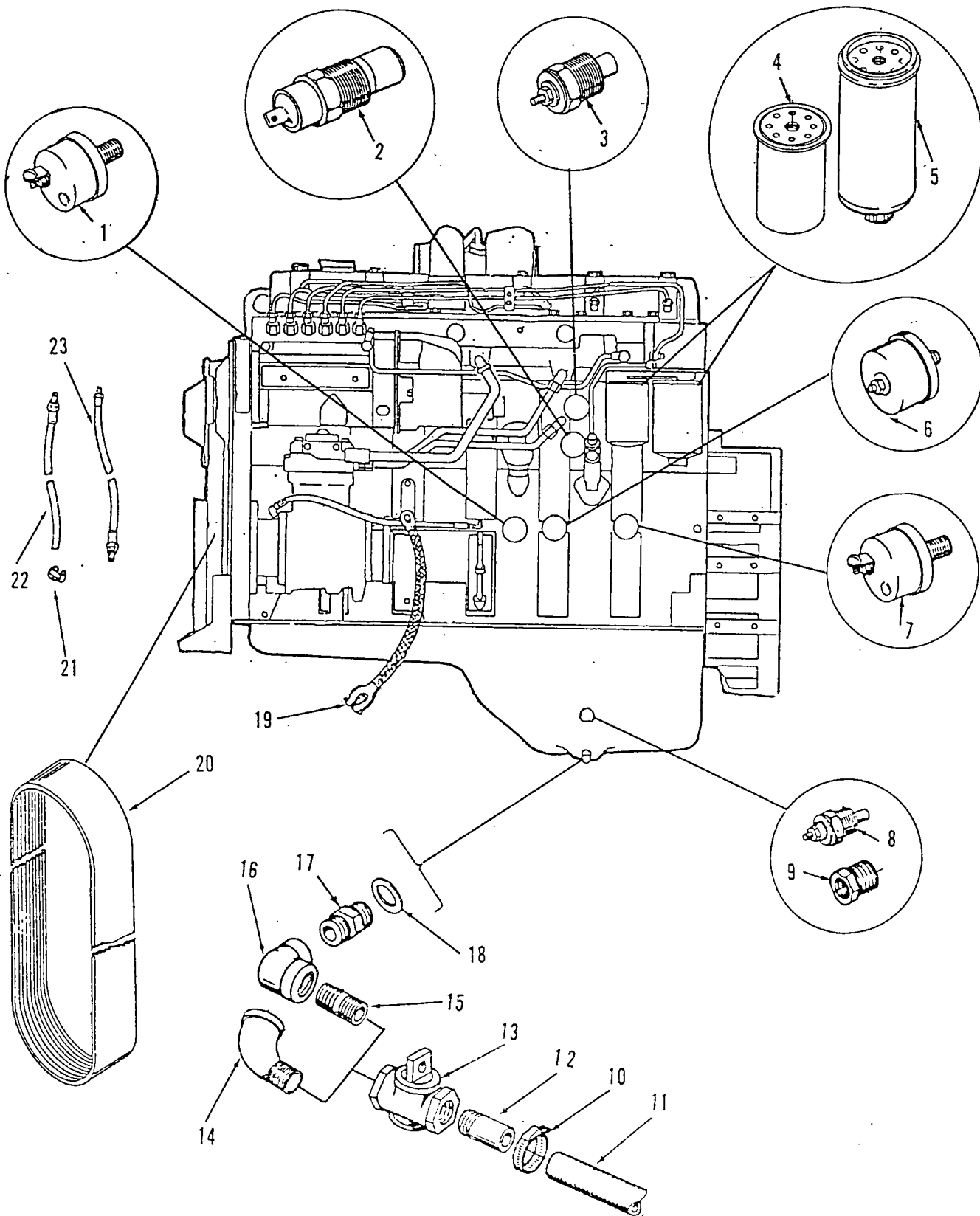
External Engine Components Left Side

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	800-2110	1	Screw, Cap - Hex Head (M12 x 1.75 x 20mm)	11	Note 1		Filter, Water - W/Corosion Inhibiting Chemical DCA4
2	856-0013	1	Washer, Lock - EIT (1/2")		130-3537	1	Service
3	332-2739	1	Terminal Assembly (Includes item 3 thru 7)		130-3539	1	Pre-Charging
4	809-0035	1	Screw, Tapping - Round Head (#8 x 3/4")	12	309-0554	1	Switch, Thermostatic-Engine Coolant Temperature (S2)
5	508-0015	1	Washer, Insulating	13	505-0021	1	Bushing, Reducer
6	870-0196	1	Nut, Insulated	14	Note 2	1	Alternator - 24 VDC (CEC# 3911462)
7	332-2738	1	Board, Terminal	15	122-0756	1	Element - Oil Filter
8	800-2058	1	Screw, Cap - Hex Head (M8x1.25 x 25mm)	16	416-0923	1	Cable, Battery - Jumper
9	850-2008	1	Washer, Lock (M8)	17	416-0915	1	Cable, Battery (44"Lg)
10	309-0269	1	Switch, Thermostatic- Low Engine Temperature (S4)	18	Note 2	1	Starter, Electrical - 24 VDC (CEC# 3910644)

NOTES:

1. Replacement cartridges recommend and should be used in lieu of the Original Engine Factory Installed Item which contains a Pre-Charge amount of DCA or DCA4 Chemical. Replacement with Pre-charge Cartridge may overload the Cooling System and cause problems or failure of the Set.
2. CEC# - Cummins Engine Company Part Number.

External Engine Components Right Side



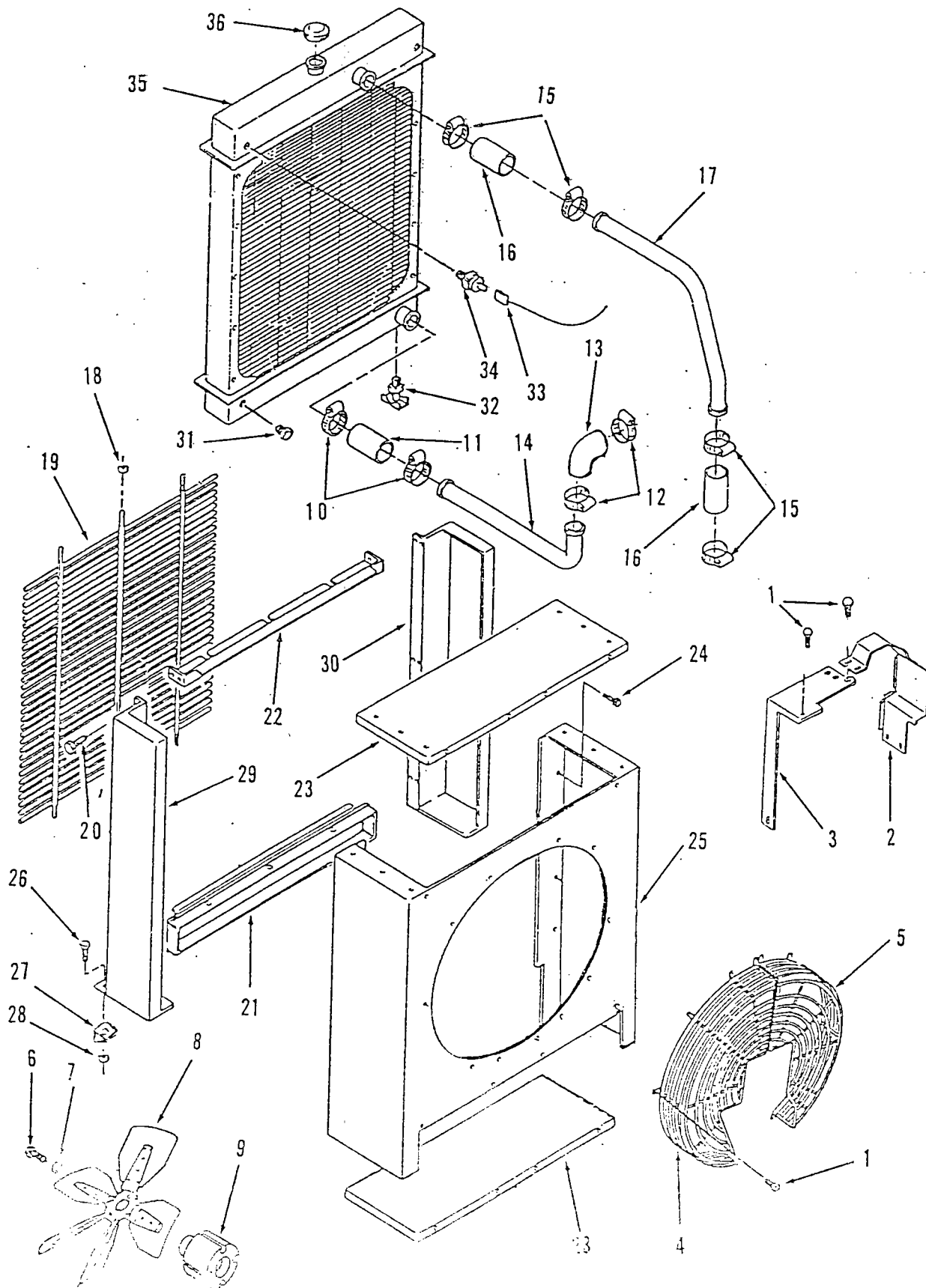
External Engine Components Right Side

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	309-0272	1	Switch, Pressure - Oil, Shutdown (S1)	11	503-0098	1	Hose
2	309-0553	1	Switch, Thermostatic - Engine Coolant Temperature, Pre-Alarm (S6)	12	505-0185	1	Nipple, Pipe - Half
3	193-0375	1	Sender, Temperature - Engine Coolant (E2)	13	504-0011	1	Valve, Shutoff
4	149-2251	1	Filter, Fuel - Secondary	14	505-0248	1	Elbow, Pipe - Street, 45 Deg.
5	149-2252	1	Filter, Fuel - Primary	15	505-0100	1	Nipple, Pipe (Note 1)
6	193-0244	1	Sender, Pressure - Oil (E1)	16	505-0040	1	Elbow, Pipe - 90 Deg (Note 1)
7	309-0561	1	Switch, Pressure - Oil, Pre-Alarm (S5)	17	102-1237	1	Adapter, Drain - Oil
8	193-0353	1	Sender, Temperature - Oil (E4)	18	102-1147	1	Gasket, Drain - Oil Pan
9	505-1373	1	Bushing, Reducer (M22 x 1/8 NPTF)	19	416-0619	1	Cable, Battery (18"Lg)
10	503-0197	1	Clamp, Hose	20	Note 2	1	Belt, Drive - Fan & Altr 6CT Engine(CEC#3911573)
					Note 2	1	6CTA Engine(CEC#3911571)
				21	503-0685	1	Clamp, Hose
				22	501-0502	1	Line, Fuel - Flex (Fuel Out)
				23	501-0441	1	Line, Fuel - Flex (Fuel In)

NOTES:

- Optional installation of Oil Drain Components uses items 15 and 16 in lieu of item 14.
- CEC# - Cummins Engine Company Part Number.

Cooling System - Radiator



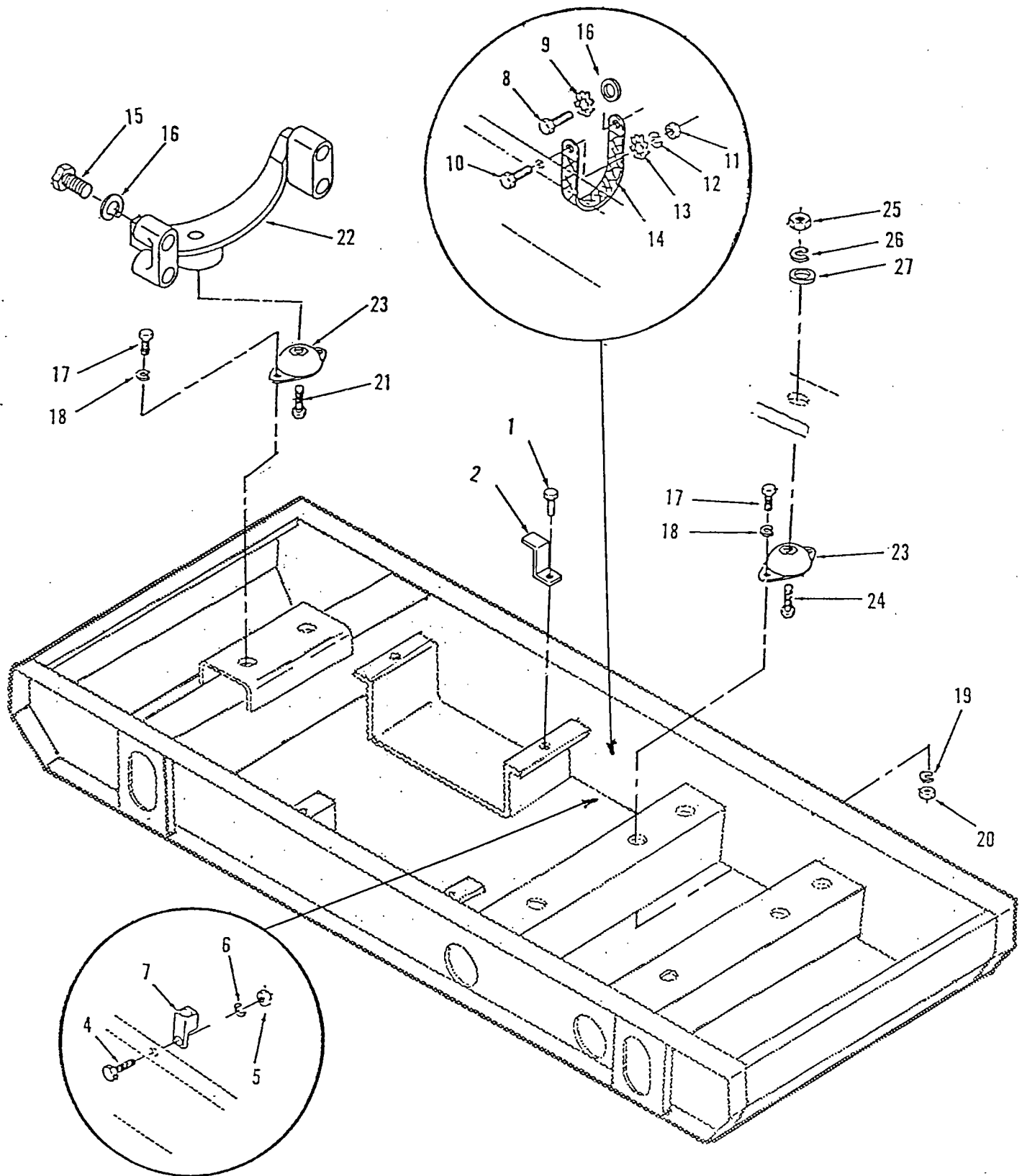
Cooling System - Radiator

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	821-0018	36	Screw, Cap - Hex Head (1/4-20 x 5/8")	20	821-0010	8	Screw, Self-locking - Hex Washer Head (1/4-20 x 1/2")
2	130-3218	1	Guard, Belt	21	130-3204	1	Support, Grille - Lower
3	130-3217	1	Guard, Belt	22	130-3203	1	Support, Grille - Upper
4	130-3209-01	1	Guard, Fan	23	130-3206	2	Shroud - Top/Bottom
5	130-3209-02	1	Guard, Fan	24	821-0028	16	Screw, Self-locking - Hex Washer Head (3/8-16 x 1/2")
6	800-2096	4	Screw, Cap - Hex Head (M10 x 1.5 x 75mm)	25	130-3205	1	Wrapper, Shroud - Fan
7	850-2010	4	Washer, Lock - Spring (M10)	26	801-0049	4	Screw, Cap - Hex Head (3/8-16 x 1-1/4")
8	130-3208	1	Fan, Radiator	27	526-0280	4	Washer, Bevel
9	130-3216	1	Spacer, Fan	28	870-0281	4	Nut, Self-locking - Hex (3/8-16)
10	503-0365	4	Clamp, Hose	29	130-3202-01	1	Guard, Radiator
11	503-1599	1	Hose, Radiator	30	130-3202-02	1	Guard, Radiator
12	503-1586	2	Clamp, Hose	31	502-0153	3	Plug, Pipe - Hex (1/4 NPT)
13	Note 1	1	Elbow, Hose (CEC#3919389)	32	504-0003	1	Cock, Drain (1/4 NPT)
14	130-3212	1	Tube, Outlet - Radiator	33	338-1919	1	Harness, Wiring
15	503-0465	4	Clamp, Hose	34	153-0322	1	Sender, Level - Coolant
16	503-1379-01	2	Hose, Radiator	35	130-3207	1	Radiator (Includes Cap)
17	130-3211	1	Tube, Inlet - Radiator	36	130-1788	1	Cap, Radiator - 14 PSI
18	870-0281	6	Nut, Self-locking - Hex (3/8-16)				
19	130-3210	1	Grille - Radiator				

NOTES:

1. CEC# - Cummins Engine Company Part Number.

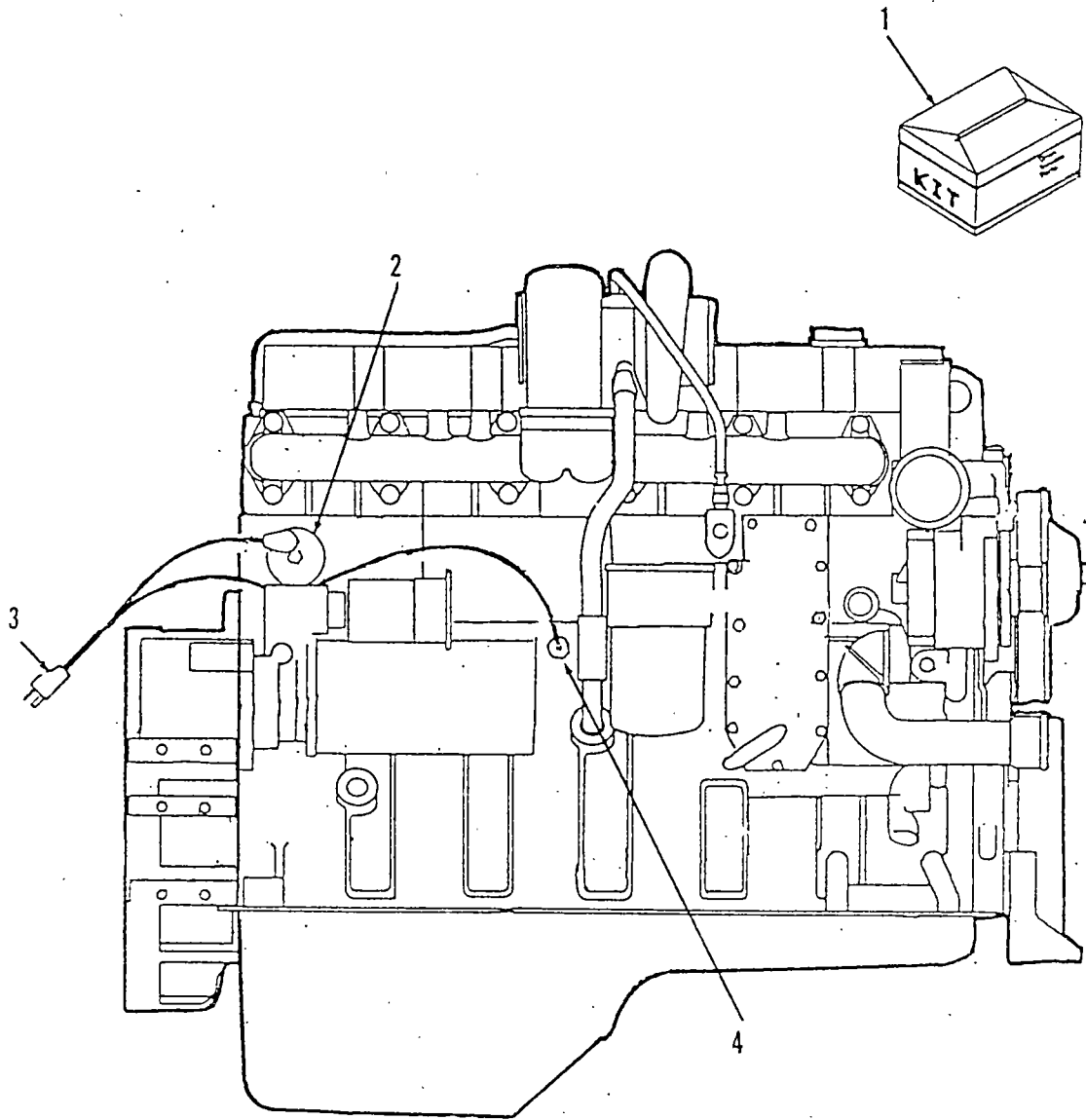
Chassis



Chassis

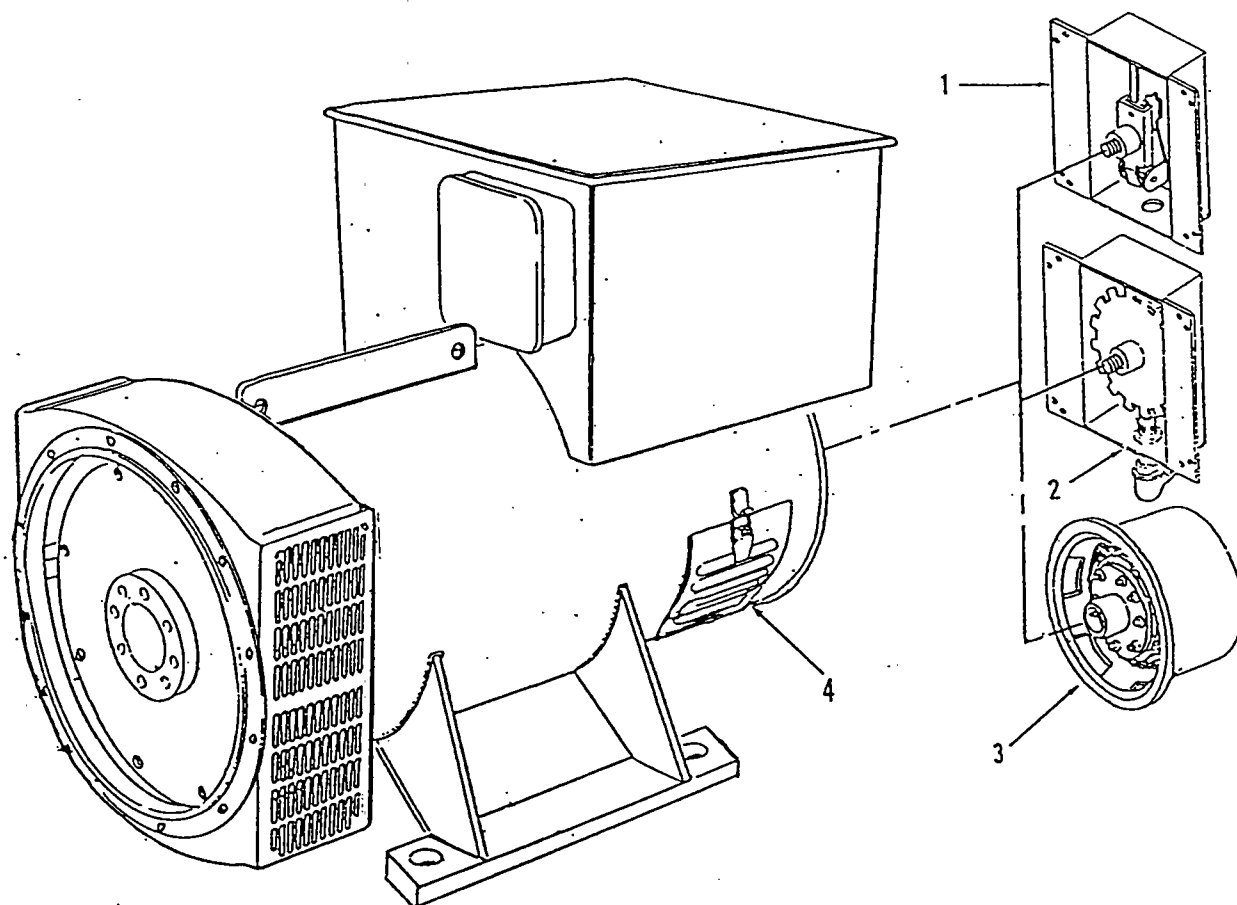
REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	870-0048	4	Screw, Cap - Hex Head (3/8-16 x 3/4")	15	800-2124	4	Screw, Cap - Hex Head (M12 x 1.75 x 90mm)
2	416-0850	4	Bracket, Retaining	16	850-2012	5	Washer, Lock (M12)
4	800-0026	1	Screw, Cap - Hex Head (5/16-18 x 3/4")	17	800-0092	10	Screw, Cap - Hex Head (1/2-13 x 1-1/2")
5	856-0008	1	Washer, Lock - EIT (5/16)	18	850-0060	10	Washer, Lock - Spring (1/2")
6	870-0257	1	Nut, Lock (5/16-18)	19	526-0219	10	Washer, Flat (1/2")
7	332-1473	1	Lug, Solderless	20	862-0016	10	Nut, Hex (1/2-13)
8	800-2111	1	Screw, Cap - Hex Head (M12 x 1.75 x 25mm)	21	800-0520	1	Screw, Cap - Hex Head (3/4-10 x 1")
9	856-0013	1	Washer, Lock - EIT (1/2")	22	403-2690	1	Support, Engine
10	800-0092	1	Screw, Cap - Hex Head (1/2-13 x 1-1/2")	23	402-0568	5	Mount, Vibration
11	862-0016	1	Nut, Hex (1/2-13)	24	800-0156	4	Screw, Cap - Hex Head (3/4-10 x 2-1/4")
12	850-0060	1	Washer, Lock - Spring (1/2")	25	862-0008	4	Nut, Hex (3/4-10)
13	856-0013	1	Washer Lock - EIT (1/2")	26	850-0079	4	Washer, Lock - Spring (3/4")
14	337-0090	1	Strap, Electrical	27	526-0233	4	Washer, Flat (3/4)

Engine Coolant Heater



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1			Kit - Engine Coolant Heater (Includes one each of items 2 thru 4)	2			Heater, Electrical
	333-0393-01	1	120 Volts		333-0391	1	120 Volts
	333-0393-02	1	240 Volts		333-0392	1	240 Volts
				3			Cord, Electrical
					335-0162	1	120 Volts
					335-0163	1	240 Volts
				4	309-0555	1	Switch, Thermostatic

Generator Frame 3



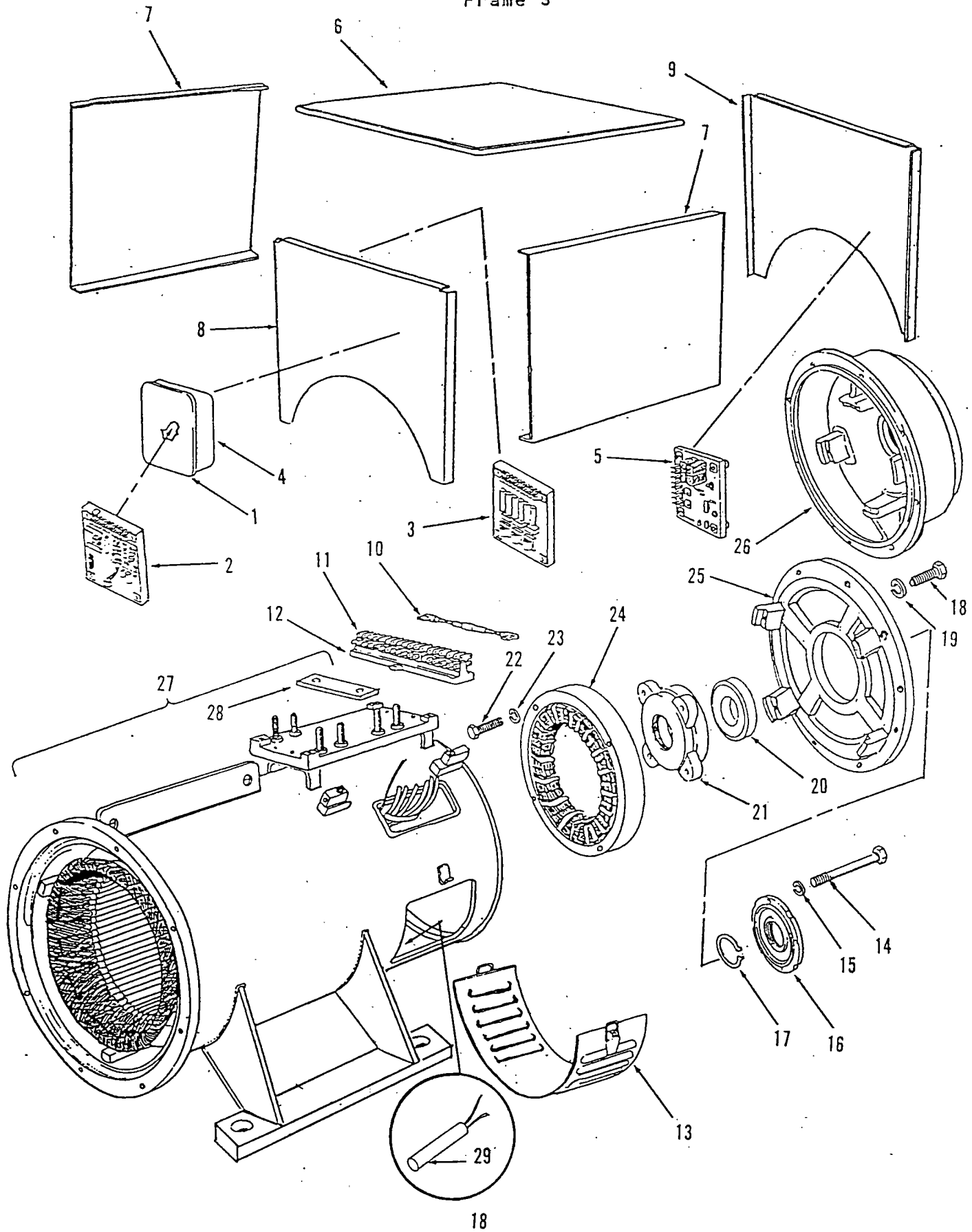
REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	Note 1	1	Module, Overspeed Switch (See Separate Page for Components)	4	Note 2		Generator (See Separate Pages for Stator and Rotor Components)
	821-2045	4	Attaching Parts Screw, Self-locking - Hex Hd (M8 x 1.25 x 16mm)				Attaching Parts Generator to Chassis
2	Note 1	1	Module, Overspeed Sensor (See Separate Page for Components)	800-0156	4		Screw, Cap - Hex Head (3/4-10 x 2-1/2")
	821-2045	4	Attaching Parts Screw, Self-locking - Hex Hd (M8 x 1.25 x 16mm)	850-0079	4		Washer, Lock - Spring (3/4")
3	Note 1	1	Module, Permanent Magnet Exciter (See Separate Page for Components)	526-0238	4		Washer, Flat (3/4")
	249-0298	4	Attaching Parts Screw, Cap - Hex Head (M8 x 16mm)	862-0008	4		Nut, Hex (3/4-10)
	249-0218	4	Washer, Lock (M8)	800-2088	12		Adapter to Flywheel Housing Screw, Cap - Hex Head (M10 x 1.5 x 35mm)
	249-0315	4	Clamp, Retaining	850-2010	12		Washer, Lock - Spring (M10)
				805-0015	8		Drive Disc to Flywheel Bolt - Hex Head (3/8-16 x 3/4", Grade 8)
				526-0124	8		Washer, Flat (1-1/2"OD x 13/32"ID)

Notes:

1. Components for Modules located on separate pages, consult Table of Contents for page number.

2. For replacement Generator please supply the complete Gen Set nameplate and Generator nameplate data.

Generator Stator Section Frame 3



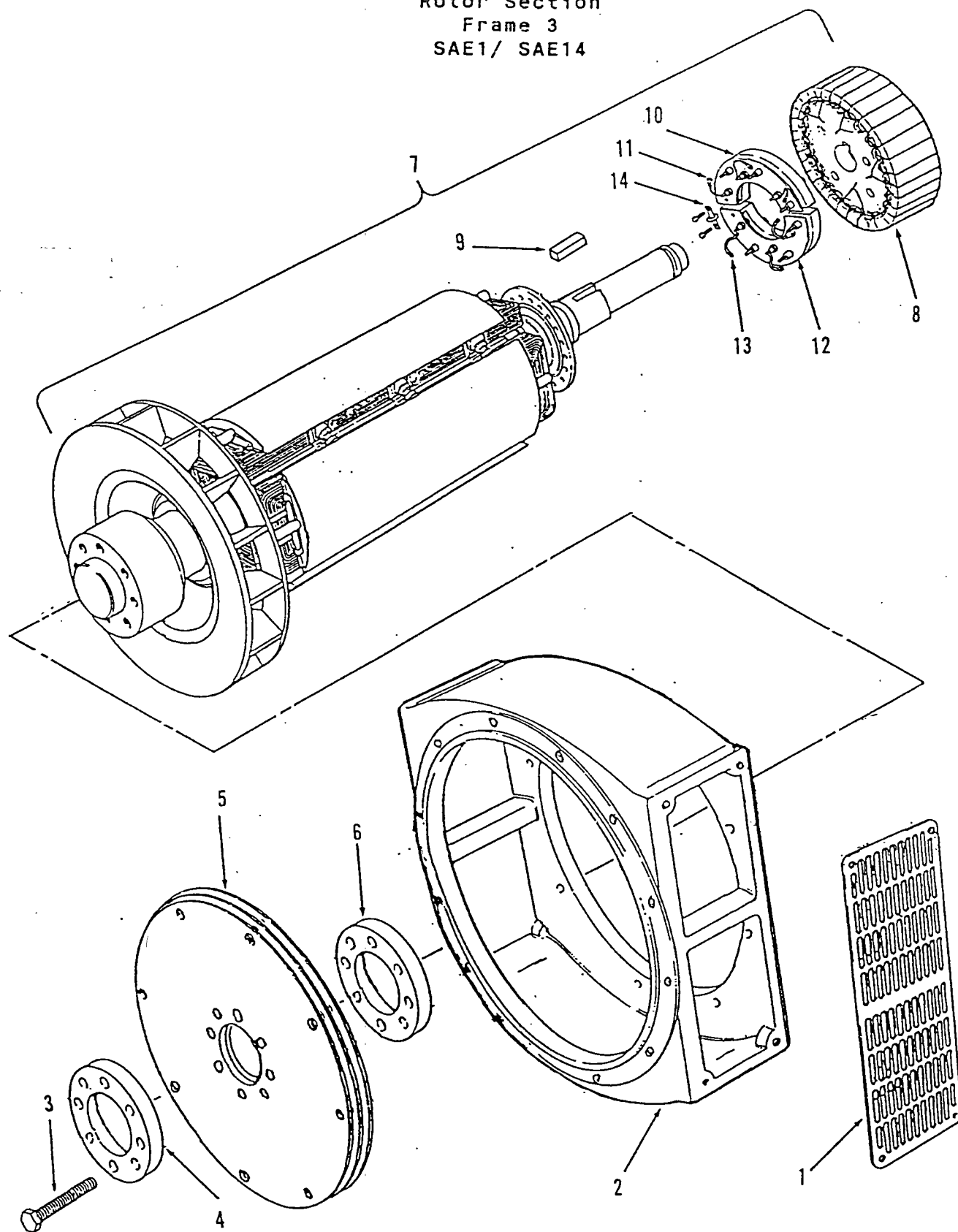
Generator
Stator Section
Frame 3

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	249-0631	2	Lid, Electrical Box - Plain	14	249-0302	4	Screw, Cap - Hex Head (M10 x 65mm)
			Attaching Parts	15	249-0202	4	Washer, Lock - Spring (M10)
	249-0304	8	Screw, Captive	16	249-0362	1	Cap, Bearing - Outer
2			Regulator, Voltage	17	249-0444	1	Circlip
	305-0779	1	1 or 3 Phase, Series 4	18	249-0201	8	Screw, Cap - Hex Head (M10 x 35mm)
			Excitation(Non PMG)	19	249-0202	8	Washer, Lock - Spring (M10)
	305-0770	1	1 Phase (Used with PMG)	20	249-0312	1	Bearing, Ball
	305-0778	1	3 Phase (Used with PMG Exciter & 3 Phase Sensing Module)	21	249-0361	1	Cap, Bearing - Inner
			Manual	22			Screw, Cap - Hex Head (M6 x 55mm) Gen334AS, A or B
	305-0803	1	Attaching Parts		249-0297	4	(M6 x 70mm) Gen334C or D
	249-0398	4	Pillar, Threaded	23	249-0212	4	Washer, Lock - Spring (M6)
3	249-0564	1	Module, 3 Phase Sensing	24			Stator, Exciter
			Attaching Parts		249-0334	1	Gen334AS, A or B
	249-0398	4	Pillar, Threaded		249-0366	1	Gen334C or D
4	249-0395	1	Box	25	249-0354	1	Bracket, End
5	300-3209-02	1	Module, Frequency Detection	26	249-0355	1	Bracket, End
			Attaching Parts				Gen334C or D
	249-0295	4	Screw, Cap - Hex Head (M5 x 35mm)	27	Note 2	1	Stator, Generator (Includes Terminal Studs and Links)
	249-0288	4	Washer, Plastic (M5)				Attaching Parts Stator to Adapter
	249-0287	4	Nut, Hex - Nylon (M5)		249-0201	8	Screw, Cap - Hex Head (M10 x 35mm)
6	Note 1	1	Lid		249-0202	8	Washer, Lock - Spring (M10)
7	Note 1	2	Panel, Side	28	249-0404	4	Link, Terminal
8	Note 1	1	Panel, Front	29			Heater, Electrical - Replacement
9	Note 1	1	Panel, Rear		249-0621	1	70 Watt, 120 VAC
10	249-0428	1	Resistor (Voltage Code H Only)		249-0622	1	70 Watt, 240 VAC
11	249-0289	3	Block, Terminal - AUX				
12	249-0424	1	Base, Terminal - AUX				
13	249-0368	2	Grille, Inlet - Air				

Notes:

1. Parts NOT STOCKED for replacement; If needed supply complete Gen Set nameplate data.
2. Part NOT STOCKED; Replacement is by complete Generator Assembly; please supply the complete Gen Set nameplate and the Generator nameplate data.

Generator
Rotor Section
Frame 3
SAE1/ SAE14



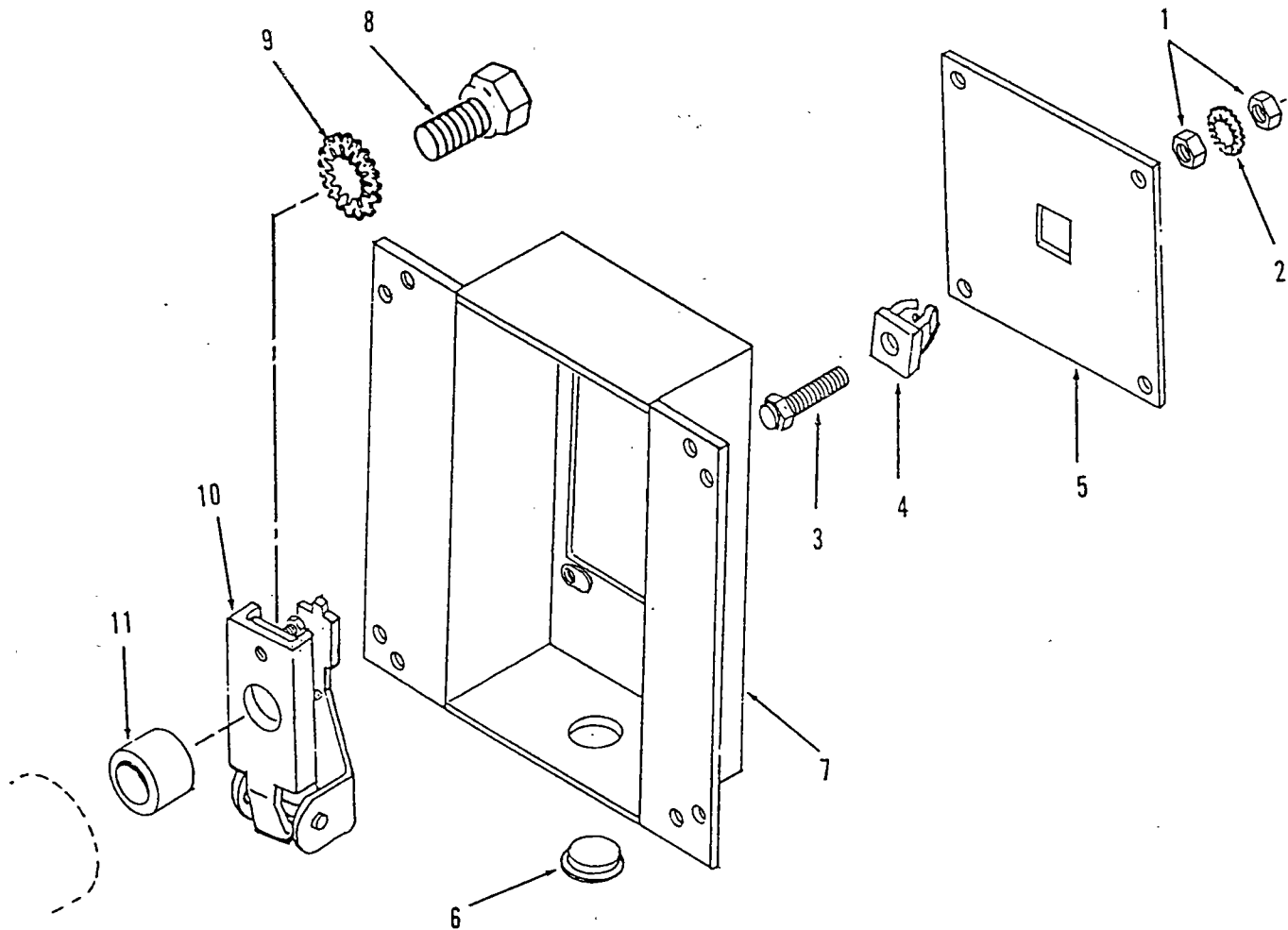
Generator
Rotor Section
Frame 3
SAE1/ SAE14

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	249-0371	2	Screen, Air - Adapter	8			Rotor, Exciter (Does Not Include Rectifier Assy)
	249-0294	8	Screw, Cap - Hex Head (M5 x 12mm)		249-0336	1	Gen334AS
	249-0307	8	Washer, Lock - Spring (M5)		249-0367	1	Gen334A, B, C or D
	249-0308	8	Washer, Flat (M5)	9	249-0271	1	Key
2	249-0369	1	Adapter, Generator (SAE1)	10	249-0340	1	Rectifier Assy, Forward (Includes Item 11 Diodes)
3	249-0292	8	Screw, Cap - Hex Head (M16 x 60mm)	11	249-0281	3	Diode, Forward Polarity
4	249-0402	1	Plate, Pressure	12	249-0341	1	Rectifier Assy, Reverse (Includes Item 13 Diodes)
5	249-0328	3	Disc, Drive (SAE14)	13	249-0282	3	Diode, Reverse Polarity
6	249-0363	1	Spacer	14	249-0283	1	Varister
7	Notel	1	Rotor, Generator (Includes Exciter, Key, and Rectifier Assemblies)		249-0294	2	Attaching Parts Screw, Cap - Hex Head (M5 x 12mm)

Notes:

1. Part NOT STOCKED; Replacement is by complete Generator Assembly; please supply the complete Gen Set nameplate and the Generator nameplate data.

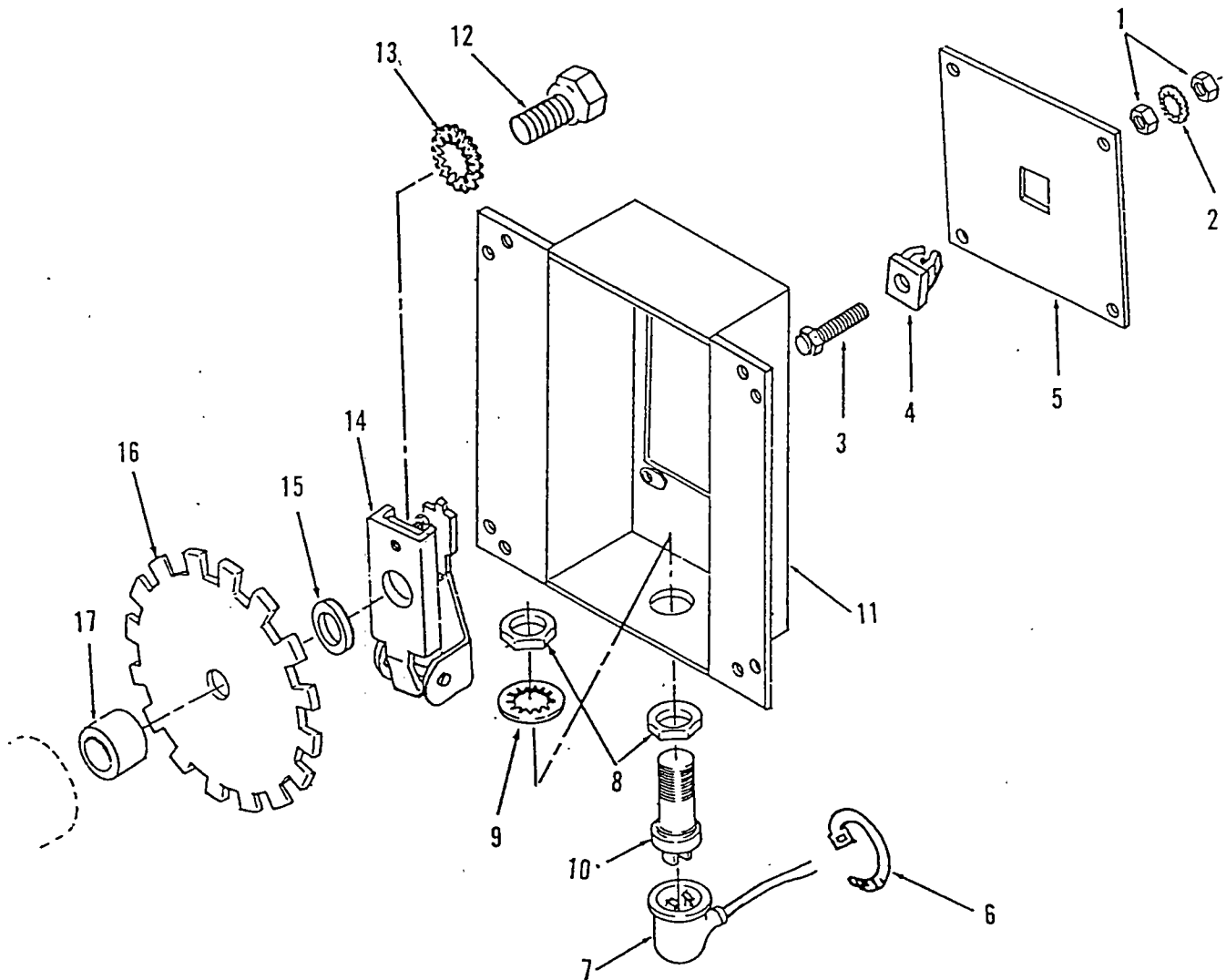
Generator Overspeed Switch



REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	862-0001	2	Nut, Hex (1/4-20)
2	853-0013	1	Washer, Lock - EIT (1/4")
3	150-0723	1	Point, Overspeed
4	870-0250	1	Nut, Insulated
5	150-2206	1	Plate, Mounting
	821-0005	4	Screw, Self-locking - Hex (#10-32 x 1/2")

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
6	517-0136	1	Plug, Plastic
7	150-2207	1	Cover, Overspeed Switch
8	718-1058	1	Screw, Cap - Hex Head (M10 x 1.5 x 45mm)
9	856-0010	1	Washer, Lock - EIT (3/8")
10	150-0956	1	Switch, Overspeed
11	370-4032	1	Spacer, Sleeve

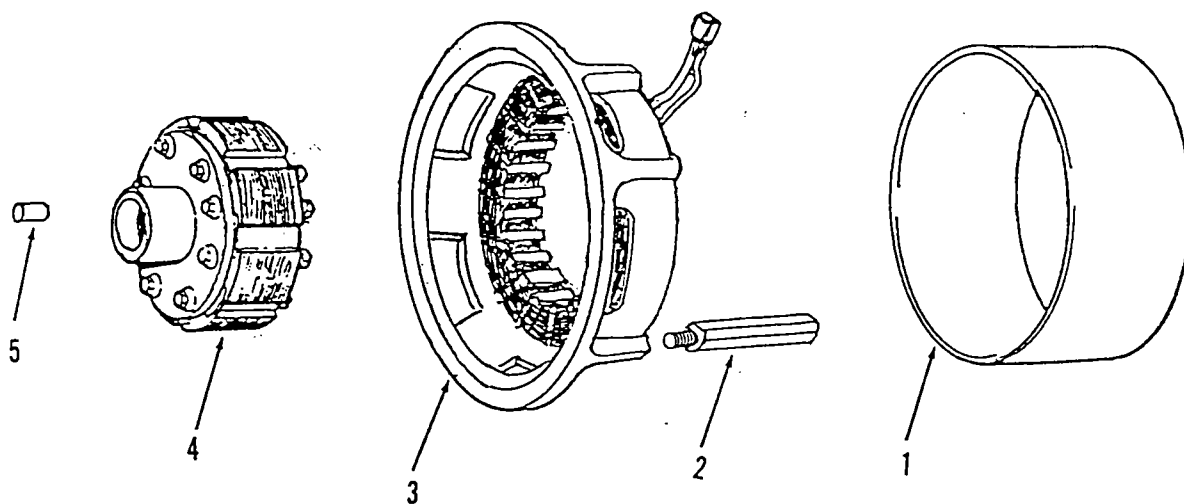
Generator Overspeed Sensor



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	862-0001	2	Nut, Hex (1/4-20)	9	854-0031	1	Washer, Lock - IT (3/4")
2	853-0013	1	Washer, Lock - EIT (1/4")	10	150-1406	1	Sensor, Speed
3	150-0723	1	Point, Overspeed	11	150-2207	1	Cover, Overspeed Switch
4	870-0250	1	Nut, Insulated	12	718-1058	1	Screw, Cap - Hex Head (M10 x 1.5 x 45mm)
5	150-2206	1	Plate, Mounting	13	856-0010	1	Washer, Lock - EIT (3/8")
	821-0005	4	Screw, Self-locking - Hex (#10-32 x 1/2")	14	150-0956	1	Switch, Overspeed
6	332-1445	5	Tie, Cable	15	370-4031	1	Spacer, Sleeve
7	338-2189-02	1	Harness, Wiring	16	150-2204	1	Wheel - Speed Sensor
8	868-0011	2	Nut, Jam - Hex (3/4-16)	17	370-4032	1	Spacer, Sleeve

NOTES

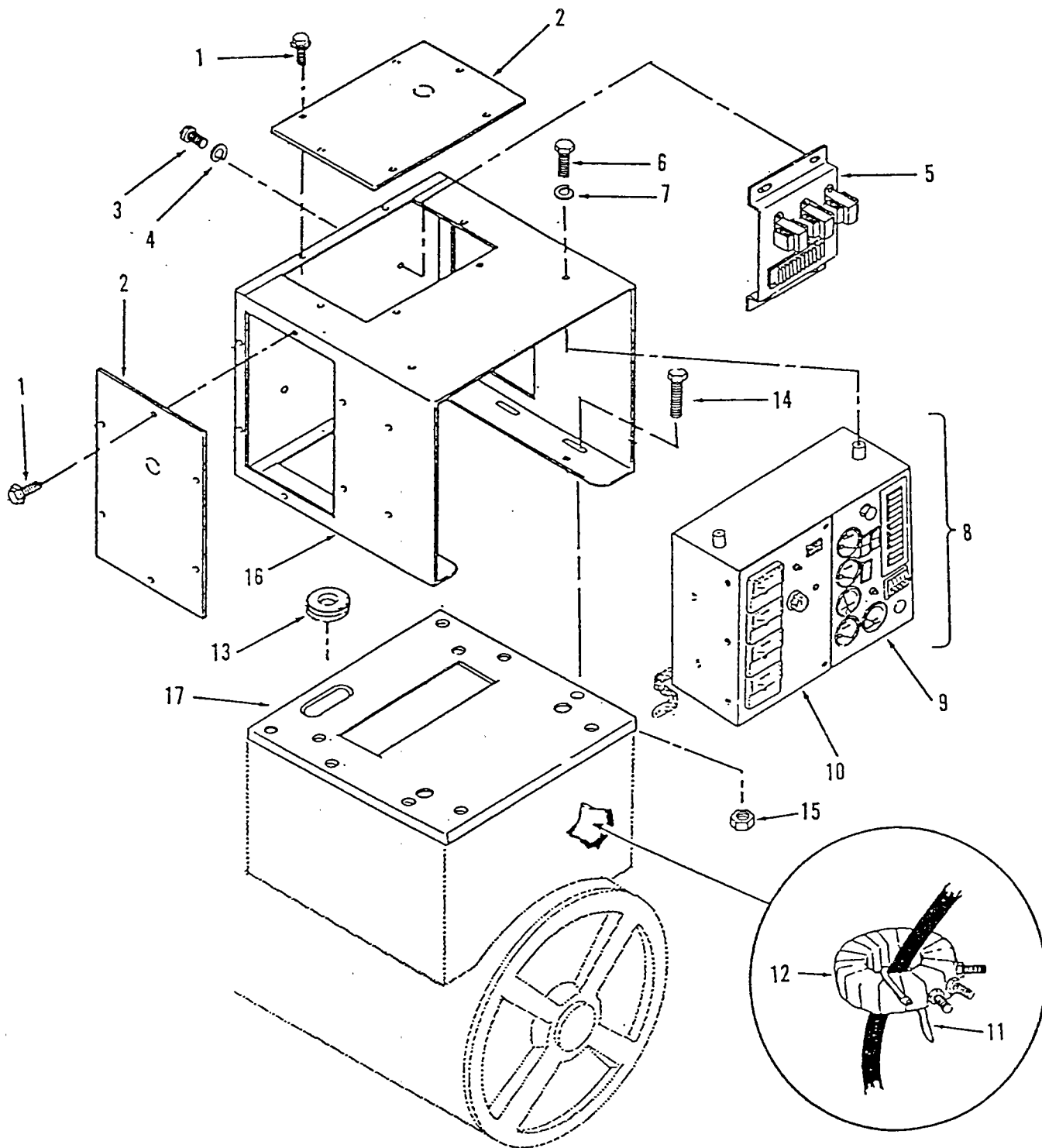
Generator Permanent Magnet Exciter



REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	249-0497	1	Cover
	249-0294	3	Attaching Parts for Cover Screw, Cap - Hex Head (M5 x 12mm)
	249-0307	3	Washer, Lock (M5)
2	249-0496	3	Pillar, Threaded
3	249-0426	1	Stator, Exciter with Frame

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
4			Rotor, Exciter
	249-0427	1	Frame 2, 3, 4 Generators
	249-0644	1	Frame 5, 6, 7 Generators
			Attaching Parts for Rotor
			Bolt - Select as Required
	249-0399	1	Frame 2, 3, 4 Generators
	249-0495	1	Frame 5, 6, 7 Generators
	249-0202	1	Washer, Lock (M10)
5	249-0313	1	Pin, Dowel

Generator Set Control



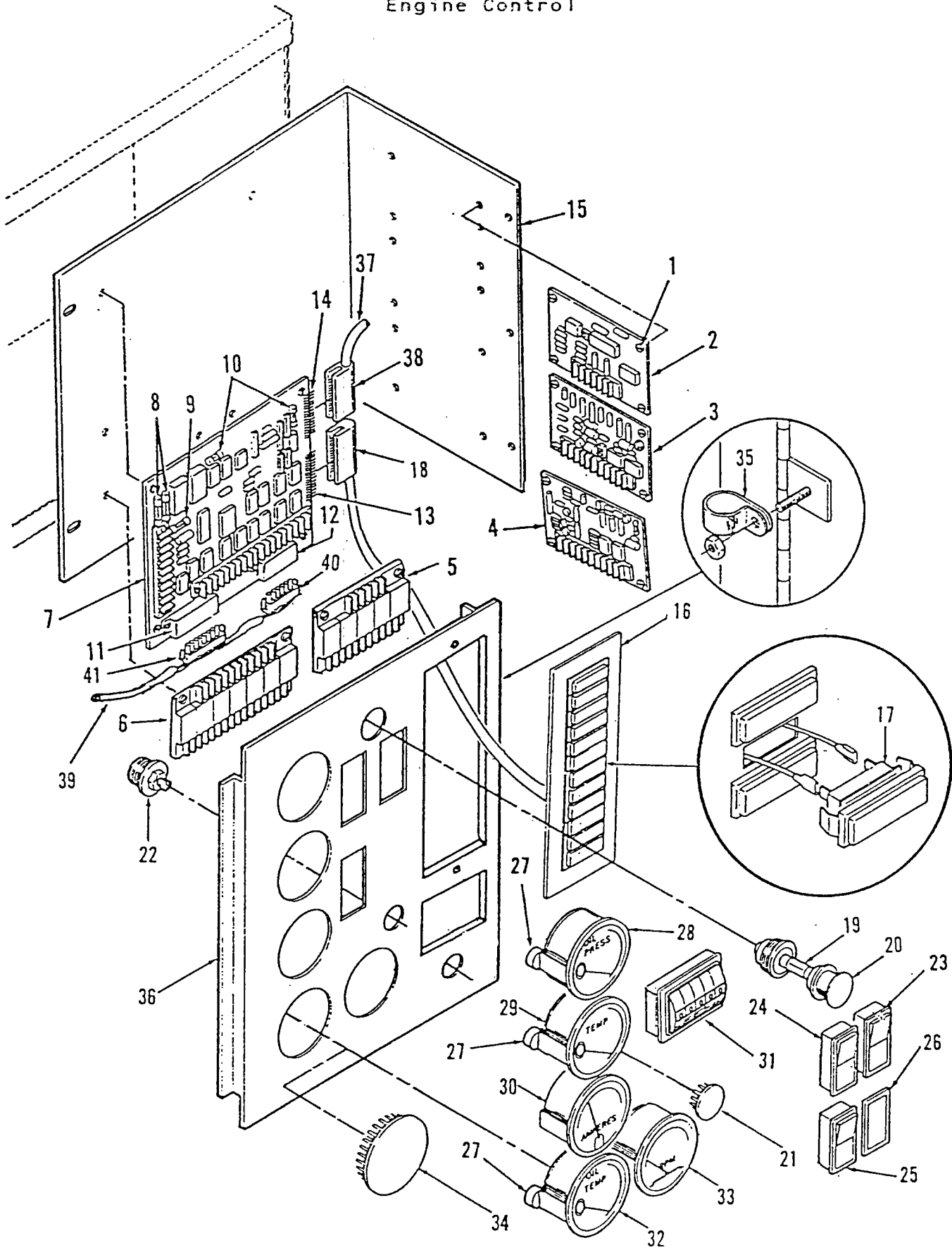
Generator Set Control

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	821-0005	18	Screw, Self-locking - Hex (#10-32 x 1/2")	12			Transformer, Current - Reconnectible
2	319-0077	3	Panel, Box - Control	302-1794-02	3		Ratio 100/5 or 200/5
3	812-0156	4	Screw, Machine - Round Head (1/4-20 x 1/2")	302-1794-04	3		100 & 150kW Voltage Code H
4	850-0040	4	Washer, lock - Spring (1/4")	302-1794-05	3		Ratio 200/5 or 400/5
5	Note 1	1	Transformer Assy, Potential (See Separate Page for Components)	302-1794-07	3		100kW Voltage Code Z.
6	800-0051	4	Screw, Cap - Hex Head (5/16-18 x 1/2")				Ratio 250/5 or 500/5
7	850-0045	4	Washer, Lock - Spring (5/16")	13	508-0051	1	125kW Voltage Code L
8	Note 1	1	Control, Set (See item 9 & 10 for Components)	14	821-0018	6	Ratio 375/5 or 750/5
9	Note 1	1	Control, Engine (See Separate Page for Components)	15	870-0212	6	135kW Voltage Code Z
10	Note 1	1	Control, Generator (See Separate Page for Components)	16	301-3155	1	150kW Voltage Code L
11	332-0941	6	Tie, Cable	17	319-0011	1	Grommet
							Screw, Self-locking - Hex Head (1/4-20 x 5/8")
							Nut, Self-locking - Hex (1/4-20)
							Housing, Control
							Adapter, Housing to Terminal Box (Frame 3 Generators)

Notes:

1. Components for Controls located on separate pages, consult Table of Contents for page number.

Engine Control



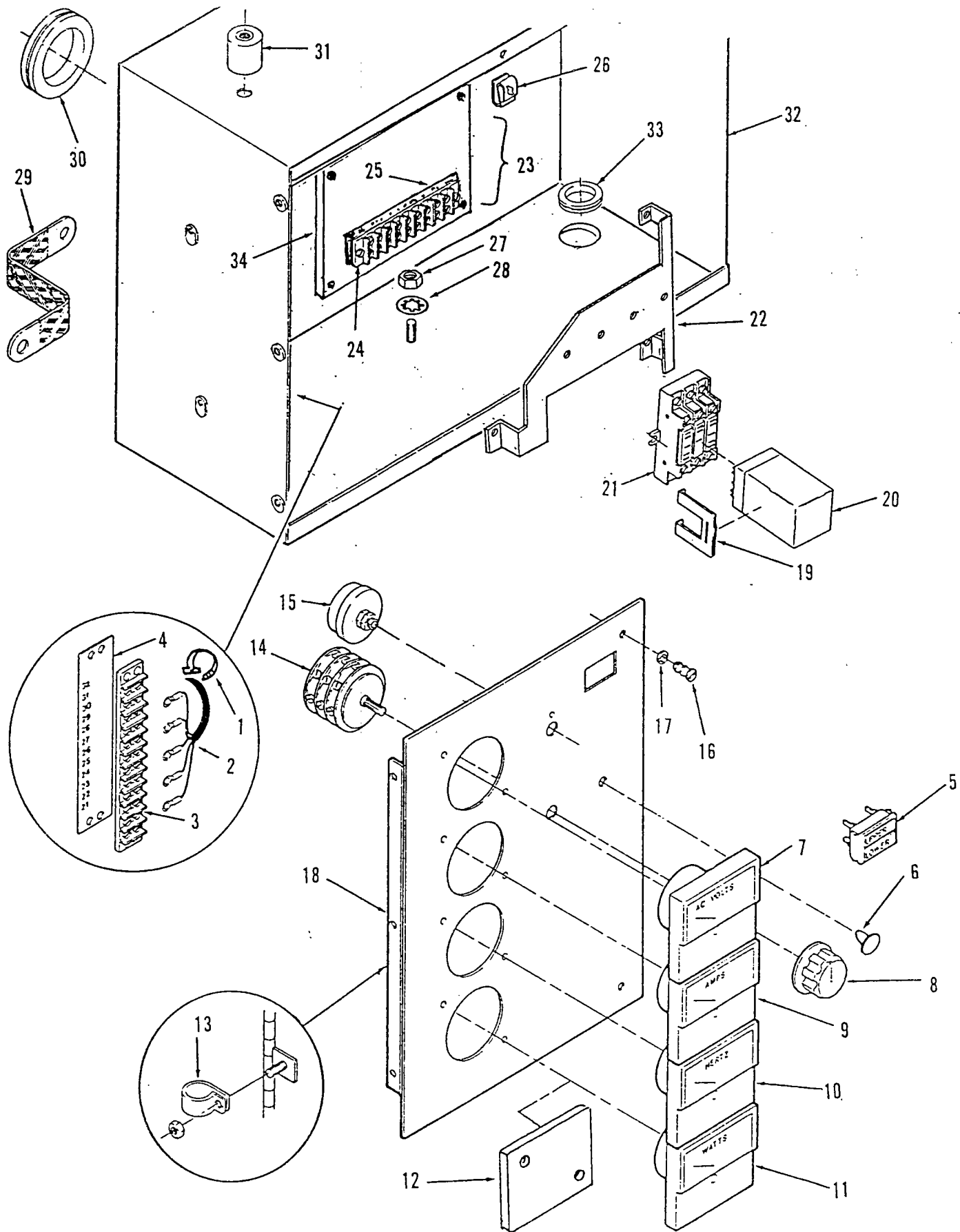
Engine Control

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	815-0544	24	Screw, Machine - Round Head With IT Lock Washer (#6-32 x 1/2")	17	322-0369-02	12	Lamp, Incandescent - 1/3 Watt 28 VDC
2	300-2899	1	Board, Time Delay, Start/Stop - 24 VDC (A15)	18	323-1310	1	Housing, 13 Pin (J3)
3			Board, Magnetic Sensor, Start Disconnect/Over Speed Sensor (A16)	19	322-0017	1	Contact, Pin
	300-2903	1	Standard	20	322-0361	1	Lamp, Incandescent - 28 VDC (DS11)
	300-2904	1	Precision	21	517-0131	1	Holder, Lamp
4	300-2906	1	Board, Over-Under Voltage Sensor - 24 VDC (A17)	22	303-0280	1	Plug, Button
5	300-2856	1	Board, Relay - 24 VDC (A13)	23	308-0785	1	Potentiometer (R11)
5A	338-1836	1	Harness (A13 to A11) Note 2	24	308-0784	1	Switch, Push (S11)
6	300-2863	1	Board, Relay - 24 VDC (A14)	26	301-6257	1	Switch, Push (S12)
6A	338-1835	1	Harness (A14 to A11) Note 2	27	193-0250	3	Cover
7			Board, Engine Monitor (A11) (Includes Fuses and Connectors)	28	193-0352	1	Resistor, Gauge (R12)
	300-2808	1	24 VDC, 2 Light	29	193-0351	1	Gauge, Pressure - Oil (M11)
	300-2812	1	24 VDC, 12 Light	30	302-1790	1	Gauge, Temperature - Water (M12)
8	321-0270	2	Fuse, Cartridge - 20 Amp (F1, F2)	31	302-0885	1	Ammeter (M13)
9	321-0231	1	Fuse, Cartridge - 15 Amp (F3)		815-0385	2	Meter, Totalizing - Time (M14)
10	321-0094	2	Fuse, Cartridge - 5 Amp (F4, F5)		870-0183	2	Screw, Machine - Round Head (#6-31 x 1/2")
11	323-1305	1	Connector, 8 Pin (P1)	32	193-0330	1	Nut, Hex with ET Lockwasher (#6-32)
12	323-1303	1	Connector, 6 Pin (P2)	33	302-1873-01	1	Gauge, Temperature - Oil (M15)
13	323-1309	1	Connector, 13 Pin (P3)	34	517-0221	1	Tachometer (M16)
14	323-1307	1	Connector, 12 Pin (P4)	35	332-0052	1	Plug, Button
15	301-8851	1	Bracket, Mounting		870-0131	1	Clamp, Loop
	821-0004	4	Screw, Self-locking - Hex Hd (#10-32 x 5/16")	36	Note 1	1	Nut, Hex with ET Lockwasher (#10-32 x 1/2")
16			Module, Indicator - Fault (Includes Replaceable Lamps, Harness with Connector Housing & Contact Pins)(A12)	37	338-1817	1	Door, Control
	322-0358-02	1	24 VDC, 2 Light	38	323-1308	1	Harness, Wiring - DC Meter (Includes Connector & Pins)
	322-0360-02	1	24 VDC, 12 Light	39	323-1302	12	Housing, 12 Pin (J4)
	815-0385	2	Screw, Machine - Round Head (#6-32 x 1/2")		338-2369	1	Contact, Pin
	870-0183	2	Nut, Self-locking - Hex (#6-32)		338-2171	1	Harness, Wiring - Control to Engine (Includes Connectors and Pins)
					323-1304	1	Use with 2 Fault Light Cont.
					323-1200	6	Use with 12 Fault Light Cont.
					323-1306	1	Housing, 6 Pin
					323-1200	8	Contact, Pin

Notes:

- Selection required do to the varations in cutouts for meters, switches, etc; Contact nearest Authorized Distributor, provide configuration data for panel required. Distributor will consult with the Parts Technical Information Center for the replacement panel.
- Not Illustrated.

Generator Control



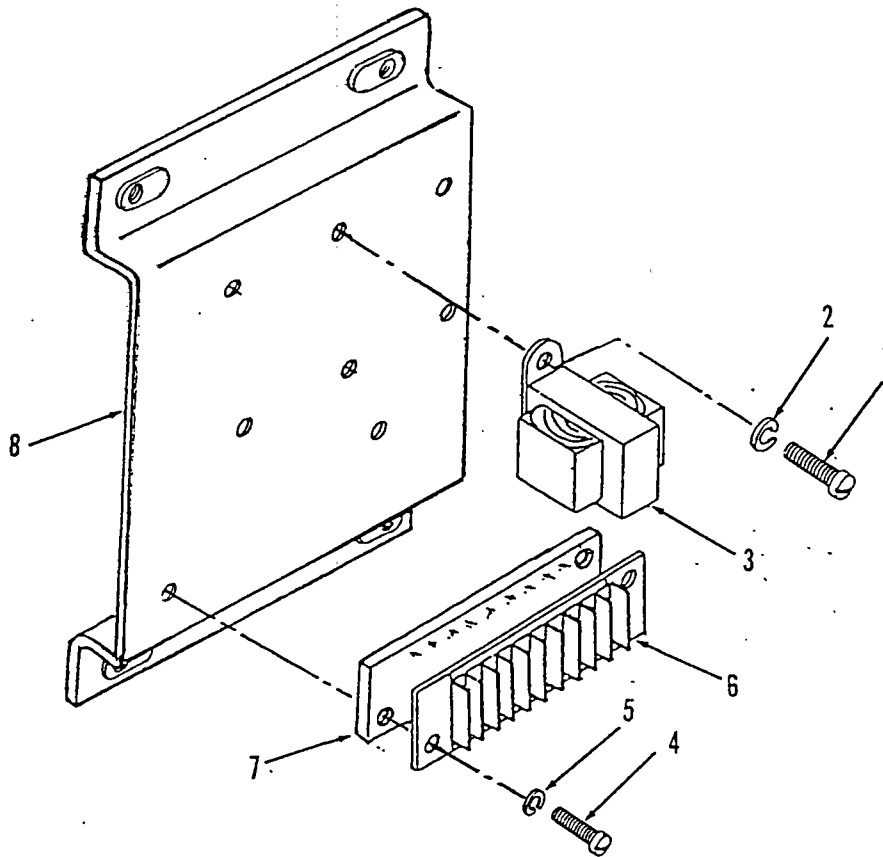
Generator Control

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	332-1445	2	Tie, Cable	18	Note 2	1	Door, Control
2	338-2375	1	Harness, Wiring		821-0004	3	Screw, Self-locking - Hex (#10-32 x 5/16")
	812-0065	2	Screw, Machine - Round Head (#6-32 x 5/8")	19	307-1987	6	Clip, Relay
3	332-0607	1	Block, Terminal (TB1)	20	307-1056	3	Relay, 24 VDC (K21)
4	332-2723	1	Strip, Marker	21	323-0804	3	Socket, Relay
5	322-0363	1	Light, Indicator - Dual (DS21, DS22)		815-0544	6	Screw, Machine - Round Head with IT Lock Washer (#6-32 x 1/2")
6	517-0131	1	Plug, Button				Bracket, Mounting - Relay
7			Voltmeter (M21)	22	319-0447		
	302-1148	1	Dual Scale 0-300/0-600V		812-0065	4	Screw, Machine - Round Head (#6-32 x 5/8")
	302-1753	1	Single Scale 0-750V	23	301-9856	1	Terminal Board Assembly
8	303-0032	1	Knob	24	332-0751	1	Block, Terminal
9			Ammeter (M22)		812-0066	2	Screw, Machine - Round Head (#6-32 x 3/4")
			Single Scale	25	332-0853	1	Strip, Marker
	302-1176	1	0-200 Amp	26	406-0332	2	Receptacle, Fastener
			Dual Scale Volt. Codes L & Z	27	871-0015	1	Nut, Hex (1/4-20)
	302-1724	1	250/500 Amp	28	853-0013	1	Washer, Lock - ET (1/4")
	302-1725	1	375/750 Amp	29	337-0049	1	Strap, Electrical (Ground)
10	302-1720	1	Meter, Frequency (M23)		800-0024	1	Screw, Cap - Hex Head (5/16-18 x 1/2")
11	Note 1	1	Wattmeter (M24) (See Separate page for Components)		856-0008	1	Washer, Lock - EIT (5/16")
12	301-9993	1	Cover, Meter Hole	30	508-0051	1	Grommet
	815-0385	2	Screw, Machine - Round Head, Black (#6-32 x 1/2")	31	402-0527	2	Mount, Vibration
	870-0183	2	Nut, Hex with ET Lockwasher (#6-32)		800-0051	4	Screw, Cap - Hex Head (5/16-18 x 1/2")
13	332-0052	1	Clamp, Loop		850-0045	4	Washer, Lock - Spring (5/16")
	870-0131	1	Nut, Self-locking - Hex with ET Lock Washer (#10-32)	32	301-8065	1	Box, Control
14	308-0284	1	Switch, Rotary (S21)	33	508-0001	1	Grommet
15	303-0287	1	Rheostat (R21)	34	301-9855	1	Plate
16	406-0334	2	Clip, Fastener				
17	406-0333	2	Stud, Fastener				

Notes:

- Components for Modules located on separate pages, consult Table of Contents for page number.
- Selection required do to the variations in cutouts for meters, switches, etc:
Contact nearest Authorized Distributor, provide configuration data for panel required. Distributor will consult with the Parts Technical Information Center for the replacement panel.

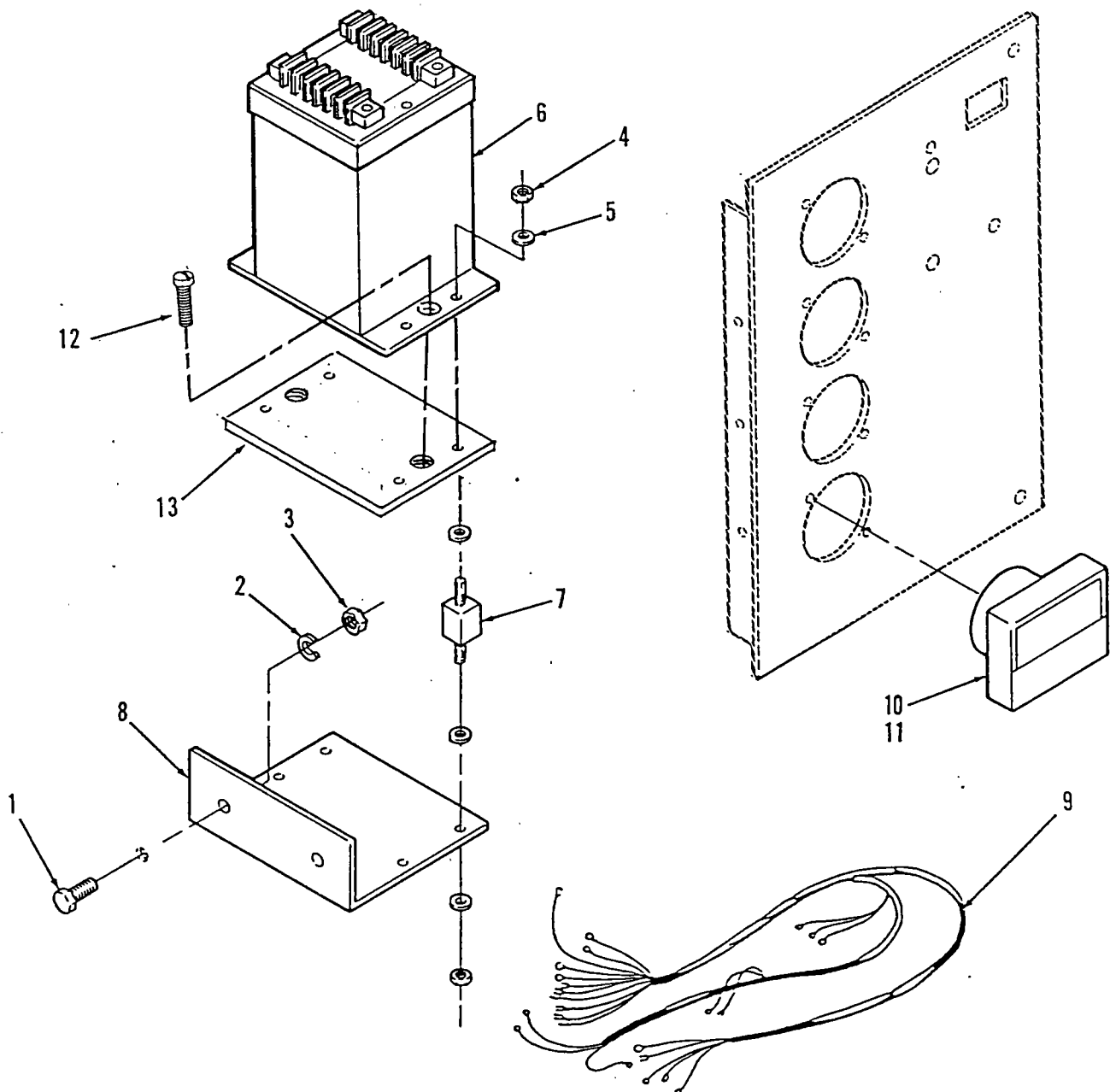
Potential Transformer



REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	812-0079	6	Screw, Machine - Round Head (#8-32 x 1/2")
2	850-0025	6	Washer, Lock - Spring (#8)
3	315-0642	3	Transformer, Potential
4	812-0082	2	Screw, Machine - Round Head (#8-32 x 3/8")
5	850-0025	2	Washer, Lock - Spring (#8)

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
6	332-2562	1	Block, Terminal (10 Place)
7	332-2563	1	Strip, Marker
8	319-0032	1	Bracket, Mounting
	812-0156	4	Attaching Parts for Bracket
	850-0040	4	Screw, Machine - Round Head (1/4-20 x 1 1/2")
		4	Washer, Lock - Spring (1/4")

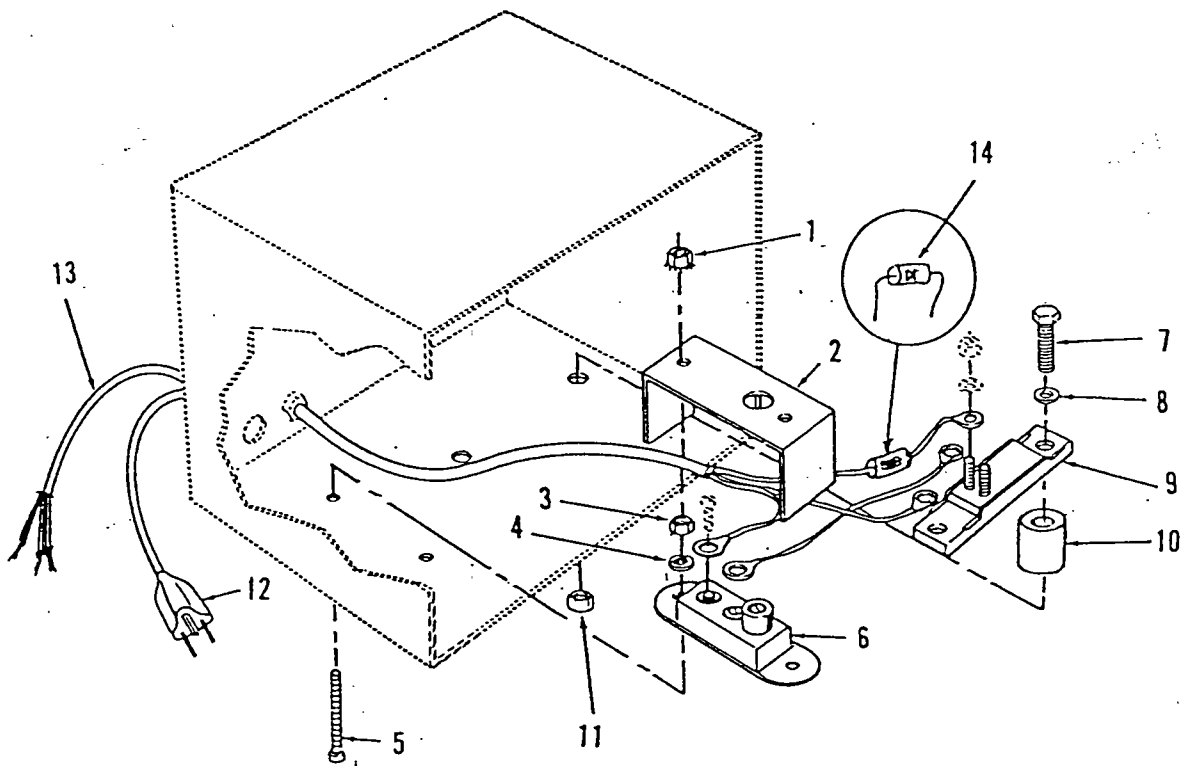
Wattmeter



REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	821-0017	2	Screw, Cap - Hex Head (5/16-18 x 1/2")
2	850-0045	2	Washer, Lock (5/16)
3	862-0014	2	Nut, Hex (5/16-18)
4	860-0008	8	Nut, Hex (#8-32)
5	856-0002	16	Washer, Lock - ET (#8)
6	302-1833-01	1	Transducer, Watt
7	402-0354	4	Mount, Shock
8	301-6987	1	Bracket, Mounting

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
9	338-1936	1	Harness, Wiring
10	302-1722	1	Wattmeter (Less Dial)
11	302-1721-06	1	Dial, Wattmeter
	302-1721-07	1	Scale 0-160kW
	302-1721-08	1	Scale 0-180kW
		1	Scale 0-200kW
12	813-0102	2	Screw, Machine - Round Head (#10-32 x 3/8")
13	319-0030	1	Plate, Support - Transducer

Control Heater



REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	870-0183	2	Nut, Self-locking - Hex (#6-32)
2	301-1886	1	Cover
3	860-0006	1	Nut, Hex (#6-32)
4	854-0006	2	Washer, Lock - IT (#6)
5	812-0070	2	Screw, Machine - Round Head (#6-32 x 1-1/4")
6	309-0128	1	Thermostat, Adjustable
7	800-0034	2	Screw, Cap - Hex Head (5/16-18 x 2-1/4")
8	526-0113	2	Washer, Flat (5/16")

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
9	333-0151	1	Heater, Electrical 120VAC
	333-0378	1	240VAC
10	130-1107	2	Spacer
11	870-0257	2	Nut, Self-locking - Hex (5/16-18)
12	335-0161	1	Cable, Electrical (120VAC Application)
13	338-2121	1	Harness Wiring with Diode, less plug (240VAC Application)
14	357-0013	1	Diode
15	98-3232	1	Decal, Warning - Shock Hazard (Not Illustrated)